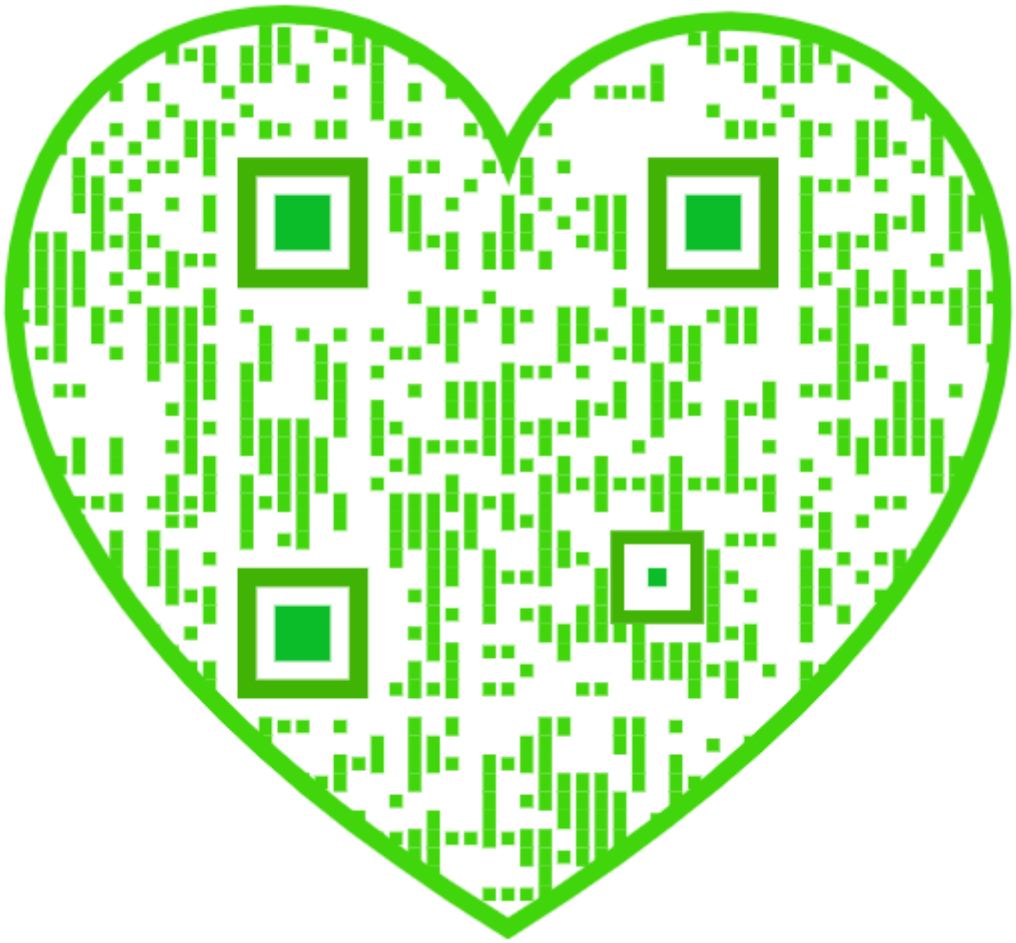

JUNIOR ARITHMETIC-BOOKKEEPING

For junior high schools, advanced grades, and such other schools as desire to give an intensely practical training course in the arithmetic of bookkeeping and in the bookkeeping of every-day business affairs that is graded to suit elementary students.

BY

H. M. ROWE, PH.D.

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NO BLANK BOOKS ARE REQUIRED WITH THIS TEXT. Ordinary ledger, journal, and foolscap paper is all that is necessary, but it is important that the paper should be of good writing quality.

While this text was planned for one-half year's intensive study with one full recitation daily, where only a limited time can be given to the subject it will provide sufficient material for one year's work.

For pupils who continue their studies in the commercial subjects no intermediary text will be found necessary before taking up the regular course of study in Rowe's Bookkeeping and Accountancy or other courses of similar grade.

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PREFACE

A preface for this book hardly seems necessary. Each year a larger number of pupils are compelled for one reason or another to leave school at an earlier age than formerly. The usual training in the commercial subjects provided in the secondary schools is neither suitable nor available for these pupils. If training in such subjects is to be had at all it must be provided in the higher elementary grades and in the junior high schools from material prepared for the special benefit of this class of pupils.

This text meets the wants of such pupils. It was prepared with the idea of making use of a vast fund of general information with regard to the elementary processes and operations of business which every boy and girl has acquired incidentally in one way or another prior to the time they take up a study of this text. This acquired information, which is of the most valuable kind, has heretofore seemingly been ignored without proper appreciation of its availability as the best sort of material upon which to build a training course that would accomplish most for the pupil in the least time.

With this nucleus to build on, together with the knowledge of arithmetic acquired in the grades, we are enabled in the single semester for which this book was prepared to provide a course that will be of great benefit to these boys and girls in any business position they may later occupy. At the same time it will prepare those who are to continue their commercial studies in secondary and other schools for a much better understanding of the more formal and extended presentations of bookkeeping, accountancy, commercial arithmetic, and similar branches which may be included in their courses. So much for the purpose of the book.

The method of presentation will be found quite distinctive. By turning over a few pages it will be noticed that much of the usual formal terminology which has been such a handicap to the understanding of the pupil has been dropped. For instance, the facts that bring about the condition of owing or being owed are quite well understood by almost every child from the multitude of experiences that have come under his observation. But when these simple concepts are disturbed and made obscure by the promiscuous use of the terms *debtor* and *creditor*, *debit* and *credit*, in most instances in a most confusing way that is in violation of almost every principle of pedagogy or logic, these terms are quite meaningless to the pupil, and the simple relations established between those who owe and those who are owed are either lost sight of or they are uncomprehended. Consequently these terms are entirely omitted from this text.

Two other important features predominate. The first is the development of what may be termed the "arithmetical sense" of the pupil in adapting his knowledge of arithmetic to the calculations of business and the commonly accepted terms of accounting expression. He is led to reason from premises with which he is already familiar. The solutions of his arithmetical problems take final shape in bookkeeping forms. Such an important document as a trading statement or a profit and loss statement is shown to be nothing more than a simple arithmetical

problem expressed in accounting form. Indeed, the more elementary forms of many of the most important papers prepared by the accountant are to the student of this text nothing more than statements of simple problems in addition and subtraction.

Another predominating feature is that the problems in the text are not presented wrong end foremost. The results required of the student are exactly the same results that would be required for similar problems as he would have to solve them in the business office. For instance, in calculating interest and discount, he is asked to find no other result than the interest, the discount, the amount, or the proceeds. He never prepares a trading statement for any other final purpose than to ascertain the gross trading profit. His work in aliquot parts, which is quite extensive, especially cultivates his "arithmetical sense." His reasoning processes are not disturbed by erratic deviations from logical procedure.

To teach this text well teachers must become "as little children," so as to appreciate what the pupil knows and to see what he knows as the pupil sees it. What he knows more than the pupil must be used unobtrusively. When this is done and the intelligence of the pupil is quickened by the sympathetic intelligence of the teacher who appreciates his opportunities as he proceeds from lesson to lesson, he will quickly discover a wonderful progress that has heretofore been thought unattainable by pupils of such immature age as those for whom this text is intended.

But the text is intended for the teaching teacher and not for the slothful one who is willing to allow his pupils to drift in their work.

A survey of the text will reveal the unusual fact that when it is completed the pupil will have covered almost the entire subject of bookkeeping without having written up a single set of books. He is, however, prepared to apply his knowledge to the widest range of circumstances that he is likely to meet with in any position requiring a knowledge of the subjects treated and which is likely to be filled by one of his age and experience.

The suggestions which appear so frequently under the caption "Purpose and Method" are intended to constantly keep before the teacher and the pupil the points that are intended to be emphasized in each lesson. These suggestions will be particularly helpful to the teacher and will make unnecessary, to a large extent, the usual daily requirement of preparing memorandums of the important points of the lesson "lest we forget."

THE AUTHOR.

JUNIOR ARITHMETIC-BOOKKEEPING

LESSON 1

1. Commercial arithmetic deals with the calculations of business. These calculations show the results of transactions between those who are engaged in business. A record of such transactions and their results is called *bookkeeping.*

2. When a series of business transactions and their results are recorded *in an orderly manner,* such record is known as *a system of bookkeeping,* hence we have the definition:

3. Bookkeeping is a systematic record of business transactions and their results.

4. Among the most important transactions in any line of business are those relating to *purchasing* goods and *selling* goods. Goods bought to sell again are called *merchandise.* Two of the important results to be ascertained in bookkeeping are the *cost of purchases* and the *cost of goods sold* for a given period of time, usually for the month or year. The following transactions provide a series of problems in which these costs are to be ascertained.

PURCHASES PROBLEMS

1. Purchases for the month of January were as follows: Jan. 3 $100; – – Jan. 5 $150; – – Jan. 11 $75; – – Jan. 12 $250; – – Jan. 17 $30; – – Jan. 23 $185; – – Jan. 29 $65; – – Jan. 31 $115. What were the total purchases for the month? Prepare the problem for solution as follows:

ILLUSTRATION 1

Problem 1.
Lesson – 1.
Jan 3. 100.
5. 150.
11. 75.
12 250.
17. 30.
23. 185.
29. 65.
31. 115.

The solution is found by *addition.* The *sum* of the purchases for January is $970, which should be written underneath the adding line thus:

29 65.
31 115.
Purchases 970.

2. February purchases were as follows: Feb. 1 $65; – – Feb. 3 $25; – – Feb. 6 $80; – – Feb. 10 $125; – – Feb. 15 $550; – – Feb. 17 $315; – – Feb. 20 $60; – – Feb. 22 $280; – – Feb. 24 $445; – – Feb. 27 $325; – – Feb. 28 $35. What was the sum of the purchases for the month? Solve as shown in illustration 1, writing the figures carefully and in straight columns.

NOTE: If the number of problems in this or any succeeding lesson is more than can be disposed of in one recitation, two recitation periods may be taken.

3. The following purchases were made in March: Mar. 2 $116.37; - - Mar. 3 $23.85; - - Mar. 6 $343.49; - - Mar 9 $297.73; - - Mar. 12 $541.32; - - Mar. 15 $16.90; - - Mar. 16 $1121.56; - - Mar. 20 $9.69; - - Mar. 21 $211.85; - - Mar. 24 $464.17; - - Mar. 26 $90; - - Mar. 28 $364.77; - - Mar. 31 $925.86. What was the cost of the goods purchased for the month?

4. April purchases were as follows per bills received: Apr. 2 $25.65; - - Apr. 3 $1217; - - Apr. 4 $62.91; - - Apr. 5 $111.11; - - Apr. 6 $7.41; - - Apr. 7 $82; - - Apr. 9 $38.10; - - Apr. 10 $3.55; - - Apr. 11 $21.90; - - Apr. 12 $68.53; - - Apr. 14 $118.15; - - Apr. 15 $36.08; - - Apr. 16 $88.27; - - Apr. 17 $91.81; - - Apr. 18 $18.19; - - Apr. 19 $204.40; - - Apr. 21 $9.52; - - Apr. 22 $11.77; - - Apr. 23 $24.25; - - Apr. 24 $33. 37; - - Apr. 25 $37.50; - - Apr. 26 $32.12; - - Apr. 28 $18.75; - - Apr. 29 $13.30; - - Apr. 30 $55.59. What was the cost of purchases for the first fifteen days of April and for the last fifteen days? What were the total purchases for the month?

Purpose and Method: The closing paragraph in each lesson contains suggestions intended for the teacher rather than for the student, although they may be commented upon with profit by both.

These suggestions indicate the *purpose* of each lesson and the *method* by which that purpose is to be accomplished. Observe that it is the *educational method* that directs the student in his reasoning processes that is referred to rather than the *method of solution* by which he secures the desired results for the different problems presented for his consideration.

It is not only important to know *what* should be accomplished in a particular lesson, and *why* and *how* it should be done, but it is of even greater importance to both teacher and student that the *method of procedure* followed by the student in his mental operations should be observed and understood.

The purpose of this lesson, for instance, is (a) to contrast commercial arithmetic with bookkeeping, (b) to show how closely they are related, and (c) to emphasize the importance of buying and selling in the transaction of business.

The method contrasts the student's knowledge of ordinary arithmetic, with which he is familiar, with *commercial* arithmetic which is defined as dealing with calculations relating to business transactions, and points out the related fact that the *record* of these transactions is called bookkeeping.

It should be remembered that *the mind reaches conclusions by making comparisons*, and that the student's conclusions are reached by comparing that which is new to him with that which he already knows. For instance, in reading paragraphs 1, 2, 3, and 4 in their order it will be seen that each new thought or conclusion is based upon a premise stated or implied in a preceding statement or conclusion. This development is inductive in method. In trying out many of the conclusions reached the analytic method will be employed. The difference between inductive and analytic processes of reasoning should be frequently pointed out to the class.

Students should be taught to reflect upon their own mental processes so that they may determine the method by which they reach conclusions. This constitutes the very essence of educational growth because such introspection will naturally result in a careful comparison of premises and a sureness in reaching correct and logical conclusions that otherwise would be unattainable.

LESSON 2

Some additional problems in finding the total cost of purchases.

1. The purchases for May were shown by the bills to be as follows: May 1 $3642.16; – – 2 $947.25; – – 4 $6372.17; – – 7 $3363.84; – – 11 $1575; – – 14 $807.96; – – 17 $2721.65; – – 22 $242.45; – – 23 $91.60; – – 26 $7519.25; – – 29 $1641.11; – – 31 $515.27. What were the total purchases for the month?

2. The purchases for January were $326.75; – – Feb. $412.13; – – Mar. $582.71; – – Apr. $93.38; – – May $516; – – June $185.50; – – July $36.37; – – Aug. $363.85; – – Sept. $251.09; – – Oct. $1835.35; – – Nov. $772.44; – – Dec. $154.85. What were the total purchases for the year?

3. If the goods carried over from the previous year cost $3600 and the purchases for the first six months of the present year were $8675.36 and for the second half of the year $13448.25, what was the total value of these goods?

4. The following were the purchases for each month during the year as shown by the bills received: For Jan. $1235.76; – – Feb. $971.84; – – Mar. $1512.19; – – Apr. $2345.49; – – May $629.32; – – June $1457.56; – – July $5412; – – Aug. $772.27; – – Sept. $886.75; – – Oct. $2922.13; – – Nov. $3928.28; – – Dec. $546.75. What was the total cost of the goods purchased for the year? If during the year goods included in these purchases amounting to $675.50 were returned because they were unsatisfactory, what was the *net cost of the goods purchased* after the value of the goods returned was deducted?

5. If to the cost of the goods purchased during the year, which amounted to $18965, there were added $215.75 paid for freight charges and $186.35 paid for express and drayage charges, how much was the cost of the goods increased and what was the total cost? If by paying cash deductions amounting to $545.70 were allowed, what was the net cost of the goods purchased during the year?

Purpose and Method: In lesson 1 the listings of purchases were treated as purely arithmetical problems in addition, with which the student is already familiar. In this lesson items *increasing* and *decreasing* the cost of purchases are included. The *method* is shown in the comparisons that the student will make consciously or unconsciously between the conclusions reached in the former lesson and those reached in this lesson.

LESSON 3

Observe that as indicated in problems 4 and 5 of lesson 2, the cost of purchases as shown by the bills may be *increased* by other costs such as freight, express, drayage, or other charges that result in making the goods *cost more* than the billed price. It is also shown that the cost of purchases may be *decreased* for the value of goods returned by us and for any rebates and allowances to us which have resulted in making the goods *cost less*, hence:

To find the cost of purchases, to the billed price add all charges that increase the cost, and subtract all goods returned and all rebates and allowances that decrease the cost.

The following problems further illustrate items that increase or decrease the cost of purchases.

1. On December 31 the total purchases for the year as shown by the bills were found to be $76347.86. Other items increasing the cost were freight $532.49, import duties $78.60, and wages paid for warehouse labor in putting the goods in shape for sale $850. Items decreasing the cost of the purchases were as follows: goods returned which were found to be damaged and unsalable $269, an overcharge on freight paid $5.35, a shortage claim allowed $7.60, and discounts allowed on bills paid in cash $418.75. What was the net cost of the purchases for the year?

ILLUSTRATION 2

Problem 1.
Lesson 3.

Costs.		Deductions.	
Pchs	76347,86	Goods rtd	269.
Frt.	532,49	Frt overchg.	5,35
Duties	78,60	Shortage	7,60
Labor	850.	Cash Discts	418,75
	77808,95		700,70
	700,70		
	77108,25	net cost of purchases	

2. The value of goods on hand at the beginning of the year, January 1, was $8533.37 and the purchases during the year were $35971.62. If no goods were sold what was the total value of goods on hand at the end of the year?

3. If the purchases for the year amounted to $6500 and there were additional costs for freight, drayage, and other charges amounting to $612.84, and deductions for rebates and allowances amounting to $948.13, what was the net cost of the purchases for the year?

4. If the cost of purchases had been increased by freight, drayage, and other charges amounting to $235 for the year and decreased by rebates and allowances amounting to $517.50, and if the total purchases as shown by the bills were $17000, what was the total cost of purchases for the year? What was the net cost of purchases for the year? How much was the cost of purchases as shown by the bills increased or decreased?

5. If from goods on hand at the beginning of the year and purchased during the year that cost $45628.36, goods were sold during the year that cost $39347.82, what was the cost of the goods remaining on hand at the end of the year?

6. If the cost of the purchases was $12333.57 and the value of the goods on hand at the end of the year at cost price was found to be $7756.37, what was the cost of the goods sold during the year?

A list of goods on hand taken at cost price is known as an *inventory* and the value of the goods so listed is known as their *inventory value.*

Purpose and Method: The first paragraph of this lesson suggests the first definite quantity having a particular bookkeeping significance, namely, the net cost of purchases. "Inventory" and "inventory value" are defined.

LESSON 4

In problems 5 and 6 of the preceding lesson it is shown that (a) *the cost or inventory value of the goods remaining on hand* at the end of the year (or other period) may be found by deducting the cost of the goods sold from the cost of purchases and (b) that *the cost of the goods sold* during the year is found by deducting the cost or inventory value of the goods on hand at the end of the year from the cost of purchases.

When a stock of goods is carried over from the preceding year its inventory value is added to the cost of purchases for the year, after which the inventory value of the goods on hand at the end of the year is deducted to find the cost of goods sold; hence:

To find the cost of goods sold for the year (or other period), to the inventory on hand at the beginning of the year (if any) add the cost of purchases for the year (as stated in lesson 3) and deduct therefrom the inventory value of the goods on hand at the end of the year.

Suggestions for Oral Problems

1. If the cost of purchases is $600 and the cost of goods sold is $400, what is the cost or inventory value of the goods on hand?

2. If the cost of purchases is $1200 and the inventory value of the goods on hand is $300, what is the cost of the goods sold?

Note: Similar oral exercises may be continued to any extent desired by the teacher.

Written Problems

Some additional problems in finding *the cost of goods sold* and *the inventory value of goods unsold.*

1. On January 1 the inventory value of the goods on hand at the close of the previous year was $24356.12, the purchases during the year were $37517.84, and at the end of the year, December 31, the inventory value of the goods on hand was $7478.76. What was the cost of the goods sold during the year? If the inventory at the close of the year had been $9478.76, what would have been the cost of the goods sold?

2. The inventory at the beginning of the year was $12346.42 and the purchases to November 1 were $16872.19, at which time there was a fire that destroyed all the goods on hand, which were covered by insurance. From the books it was ascertained that the cost of the goods sold to that date was $18310.14. What was the cost or inventory value of the goods destroyed?

3. The inventory January 1 was $8765.34. The purchases for the twelve months following were as follows: $2325.72, – – $1721.23, – – $849.97, – – $3792.82, – – $1661.65, – – $1386.79, – – $1473.38, – – $2197.87, – – $924.32, $3214.46, – – $255.18, – – $1923.65. At the close of the year the inventory value of the goods on hand was $3423.63. What was the cost of the goods sold during the year?

4. The following are the amounts of the various items of goods included in the above inventory of $3423.63. Write them in columns and see if their total equals the amount of the inventory, proceeding as follows: Divide the amounts into three columns each containing the same number of items, add each column, then add the footings and see if the total equals the amount of the inventory stated. $176.60, – – $112.23, – – $17.40, – – $347.72, – – $265.89, – – $83.47, – – $18.69, – – $41.75, – – $181.14, – – $272.45, – – $426.64, – – $109.21, – – $7.29, – – $36.75, – – $117.27, – – $84.56, – – $163.87, – – $45.50, – – $75.60, – – $52.12, – – $136.45, – – $241.38, – – $19.17, – – $79.86, – – $142.82, – – $93.36, – – $75.44.

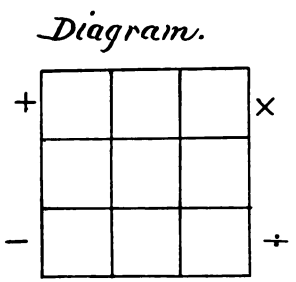
Purpose and Method: Another factor of a trading statement is introduced in this lesson. The effect of a prior and present inventory in finding the cost of goods sold is shown. The method of adhering strictly to the arithmetical viewpoint in the solution of the problems presented is recommended. The bookkeeping application will be developed in due time.

LESSON 5

In the four preceding lessons it has doubtless been observed that although the problems involved only simple additions and subtractions the work progressed rather slowly because of the inability of the pupils to add and subtract rapidly and accurately. This calls for a series of drill exercises. Such exercises in addition, subtraction, multiplication, division, or a combination of them, should be conducted at least for a few moments every day just preceding the consideration of the regular lesson assigned for the day. Pupils should remember that without the ability to calculate with speed and accuracy their progress in school will be slow and they will be unfitted for many positions of importance in business life.

Drill Chart

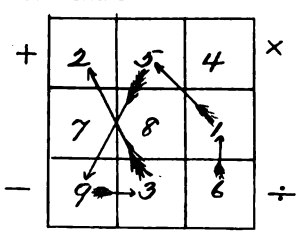
Illustration 3



The diagram shown in illustration 3 will be found very helpful in conducting drill exercises. It may be drawn or painted on blackboard or chart. The nine digits may be written in the spaces in any order desired and their location should be changed frequently. In addition drills the teacher with a pointer indicates the numbers to be added, the pupils reading the results either singly or in unison. By pointing to different figures as rapidly as the pupils can add them a remarkable speed and accuracy can be attained in a short time. This diagram may be used in other ways, some of which will be indicated in later lessons.

The *signs of* addition, subtraction, multiplication, and division shown in the diagram are used to indicate the four processes used in drill exercises, which will also be explained later. In adding exercises *results only* should be named, thus in adding, 4, 7, 5, 3, 8, the results that should be read are 4–11–16–19–27. Exactly the same method should be followed in subtraction, multiplication, and division.

Illustration 4



Illustrating the use of the diagram, the illustration in the margin shows figures inserted at random. Beginning with 6, the arrows indicating the movements of the pointer, the results should be read as follows: 6–7–12–21–24–26. The process can be continued indefinitely and the location of the different figures may be changed as often as desired. As each 100 is reached the pupils should be instructed to write 1 on a slip of paper so that the total number of hundreds or thousands in the addition can be determined. This is addition *by reading numbers.*

To TEACHER: Give at least a five minute drill in addition using the diagram. Point to figures no more rapidly than the class can add comfortably and do not continue the exercise long enough to tire the pupils.

EXERCISES IN PREPARING STATEMENTS SHOWING THE COST OF GOODS SOLD

NOTE: The following statements should be written on journal paper. If such paper is not available, blank paper should be carefully ruled by the pupil either in red or black ink. Insist upon the greatest possible neatness and accuracy in the form and arrangement of the statements. They are to prepare for the more formal trading statement which comes later. Should additional problems be thought advisable they may be increased indefinitely by changing the amounts.

1. The inventory at the beginning of the year, January 1, was $3618 5, purchases for the year $17936.50, and inventory December 31 $5510.12. W at was the cost of the goods sold during the year? Prepare a statement of the p b- lem as shown in the following illustration.

ILLUSTRATION 5

Cost of goods sold for year ending Dec 31, 19—

Inventory Jan 1, 19—	3618 75		
Purchases for the year	17936 50	21555 25	
Deduct Inventory Dec 31, 19—		5510 12	
Cost of goods sold during the year			16045 13

2. The inventory January 1 was $29823.36, purchases for the year $135312.21, and inventory December 31 $21479. What was the cost of the goods sold? Prepare a statement showing the result.

3. The inventory January 1 was $9435.43, cost of purchases for the year $37790.30, goods returned $313.65, and inventory December 31 $7264.17. What was the cost of the goods sold? Note the change in the form of statement shown in the illustration and prepare a similar one.

ILLUSTRATION 6

Cost of goods sold for the year ending Dec 31, 19—

Inventory Jan 1, 19—		9435 43		
Purchases for the year	37790 30			
less Goods returned	313 65	37476 65		46912 08
Deduct Inventory Dec 31, 19—				7264 17
Cost of goods sold during the year				39647 91

4. The inventory January 1 was $66649.49, cost of purchases for the year $244354.98, and merchandise returned $4575.25. The inventory December 31 was $8183.19 larger than the inventory January 1. Prepare a statement showing the cost of goods sold during the year.

Purpose and Method: The first paragraph and illustrations introduce the beginning of a series of drills in rapid calculations and short methods which will continue and which should receive the most careful attention throughout a good part of the course. The statements showing costs of goods sold should be considered as exercises in making statements of arithmetical problems in proper form. While these statements are component parts of a complete trading statement, that fact is not to be emphasized at this point.

Each problem should be carefully analyzed in ascertaining its purpose. In outlining the procedure an excellent result is secured, which if explained to the pupils will prove more interesting to them. Two recitation periods may usually be spent on this lesson with profit.

LESSON 6

EXERCISES IN PREPARING STATEMENTS (*Continued*)

1. The inventory January 1 was $7446.36, cost of purchases for the year $37183.38, purchases returned $4913.25, rebates and allowances on purchases $672.45, warehouse supplies for the year $245.60, and warehouse labor for the year $690. The inventory at the close of the year was $233.87 less than the inventory at the beginning of the year. Prepare a statement showing the cost of goods sold.

ILLUSTRATION 7

Cost of goods sold for year ending Dec. 31, 19—

Inventory Jan. 1, 19—			7446 36	
Cost of purchases during year	37183 38			
less Purchases returned	4913 25			
Rebates & allowances	672 45	5585 70	31597 68	
Add Warehouse supplies		245 60		
Warehouse labor		690.	935 60	39979 64
Deduct Inventory Dec. 31, 19—				7212 49
Cost of goods sold during the year				32767 15

2. The inventory January 1 was $3575.75, cost of purchases for the year $14716.76, purchases returned $987.27, rebates for overcharges and shortage claims allowed $278.15, discount allowances for prepayment of bills $328.69, warehouse supplies and labor $1260, and freight and drayage charges paid on purchases $385.75. The inventory December 31 was $325 larger than at the beginning of the year. Prepare a statement showing the cost of the goods sold.

LESSON 7

Drill exercises in addition as illustrated in lesson 5 are suggested.

As stated in ¶4, page 1, two of the important results to be ascertained in bookkeeping are the cost of purchases and the cost of goods sold. The solutions of the problems in the preceding lessons have shown how these *costs* are found.

In the same paragraph (¶4) it is stated that among the most important transactions in any line of business are those relating to the *sale of goods*. The following transactions provide a series of problems in which the *total or gross sales*, the *net sales*, and the *net returns from sales* are to be ascertained.

Sales Problems

1. The sales for the year were as follows: Jan. $575; - - Feb. $423.50; - - Mar. $327.35; - - Apr. $675.75; - - May $175.90; - - June $460; - - July $365.65; - - Aug. $410.20; - - Sept. $562.21; - - Oct. $485.25; - - Nov. $4761.85; - - Dec. $535.45. What were the total sales for the year? (Prepare the problem as shown in illustration 1.)

2. The sales for January, February and March were $1672.49; for April, May and June, $2123.27; for July, August and September, $2764.95; for October, November and December, $1873.16. What were the total sales for the year? If during the year goods included in these sales amounting to $422.60 were returned because they were unsalable, what were the *net returns from sales* after the value of the goods returned was deducted?

Observe that as shown in the above problems the total sales may be *decreased* by the value of goods returned to us. They may also be decreased by any rebates and allowances made by us which have resulted in making the goods *return* less, hence:

To find the net returns from sales, from the total sales subtract all goods returned, all rebates and allowances, and other items that have decreased the total sales.

3. The total sales for the year ending December 31 were $11325.66. During the year $216.50 worth of goods were returned, and various rebates and allowances amounting to $405.33 were made. What were the net returns from sales?

4. If the total sales for the year were $175312.80, the goods returned were $7325, and various rebates and allowances were made amounting to $845.76, with further deductions for sales discounts allowed amounting to $1216.76, what were the net returns from the merchandise sold?

5. During the month of September the sales were $3117.55, the goods returned $74.67, the allowances for overcharges $18.75, the allowances for goods damaged on account of defective packing $9, and the sales discounts $231.04. What were the net returns from sales?

Purpose and Method: The purposes of this lesson are quite clearly set forth in the explanatory matter. Emphasize the distinction between the items of goods sold which increase the returns from sales and those items which decrease the returns from sales. Each student should be required to state clearly the method of finding the net returns from sales.

LESSON 8

Suggestion: Do not forget the drill exercises in addition.

Oral Problems

1. If the sales were $25, the goods returned were $3, and other allowances were $2.50, what were the net returns from sales?

2. If the total sales were $100, the goods returned $15, and the cash discounts and other allowances were $8, what were the net returns from sales? If cash was paid for the goods, what amount of cash was received?

3. If the total sales were $65, the goods returned $4.50, and rebates and allowances amounting to $3.75 were allowed, what were the net returns from sales? If we allowed a customer a discount of $1.50 for cash, what was the net amount of cash received?

4. Goods costing $175 were sold at a profit of $35. If allowances of $1.25 were made and a discount of $.50 for cash was given, what were the net returns from sales? What was the net profit?

Exercises in Preparing Statements Showing the Net Returns From Sales

1. The gross sales for the year were $12565, the goods returned were $724.28, and the rebates and allowances were $216.31. What were the net returns from sales for the year? Prepare a statement of the problem as shown in the following illustration.

Illustration 8

Net returns from sales for year ending Dec 31 – 19—

Gross sales		12565	
less Goods returned	72428		
Rebates + allowances	21631	940 59	
Net returns from sales			11624 41

2. Gross sales for the year were $76523. Goods returned amounted to $1245.17, rebates and allowances $1741.29. Prepare a statement showing the net returns from sales for the year.

3. Prepare a statement showing the net returns from sales when the gross sales were $4675.72, goods returned $413.56, and rebates and allowances on goods sold $386.24.

Purpose and method: A sure failure in getting the results that this text is intended to secure will follow if the student is permitted to present anything but his best work, or if each one of the various statements and other papers he is asked to write does not represent the very best work of which he is capable. It is better to have the student write the same paper over even a dozen times and have it as good as he can make it than to accept anything that is inferior.

LESSON 9

PREPARING SALES STATEMENTS (*Continued*)

1. The gross sales for the six months ending June 30 were $243931.75. The value of merchandise returned during this period was $1483.24, the rebates and allowances on sales amounted to $2171.15, and sales discounts for cash payments amounting to $626.60 were allowed. What were the net returns from sales? Note the change in the form of the statement shown in the illustration below and prepare a similar one.

ILLUSTRATION 9

Net returns from sales for six months ending June 30, 19—

Gross sales		243931 75	
less Merchandise returned	1483 24		
Rebates & allowances	2171 15	3654 39	240277 36
Deduct Sales discounts for cash payments			626 60
Net returns from sales			239650 76

Note that in the above statement the *net sales* are $240277.36, the *net returns from sales* being the remainder after the sales discounts are deducted. In the statement shown in illustration 8 the *net sales* and the *net returns from sales* are the same amount, there being no sales discounts to deduct.

2. The gross sales of merchandise for the six months ending December 31 were $287916.20, goods were returned amounting to $3560, various rebates and allowances were made amounting to $1819.36, and the sales discounts allowed for cash payments amounted to $565.40. What were the net returns from sales? Prepare the statement.

3. Gross sales for the quarter ending September 30 were $102916.75. Goods returned amounted to $2412.35, rebates and allowances $941.71. Cash discounts on sales amounted to $1125.35. Prepare a statement showing the net returns from sales.

Purpose and Method: The oral problems suggested in the previous lessons may be continued to any extent desired. The statements should be prepared with the utmost care. It is *quality*, not quantity, that is wanted. Each student should be required to prepare all the statements called for.

LESSON 10

STATEMENTS SHOWING RETURNS FROM SALES (*Continued*)

1. On December 31 the gross sales of merchandise for the year were $65312.75, the goods returned $416.60, the rebates and allowances $243.35, and the sales discounts $74.30. What were the net sales and the net returns from sales? Prepare the statement.

2. If the sales for January were $1462.79, for February $989.85, and for March $1245.93, and the goods returned for the three months were $137.50, the rebates and allowances $62.75, and the sales discounts $21.07, what were the gross sales, the net sales, and the net returns from sales?

NOTE: The gross sales should appear in the statement as one amount.

3. Prepare a statement for December 31 showing the gross sales, the net sales, and the net returns from sales when the total sales for the first three months were $3462.17, for the second three months $3728.93, for the third three months $2994.78, and for the fourth three months $4257.69. The total goods returned for the year were $975, the rebates and allowances $438.79, and the sales discounts for cash allowed $12.85.

Purpose and Method: This lesson is a continuation of lesson 8, and the same feature should be emphasized.

LESSON 11

GROUPING FIGURES IN ADDITION

ILLUSTRATION 10

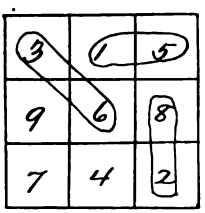


Illustration 10 shows lines circling certain of the figure in groups of two. Any other grouping of the figures would do as well. The sum of the figures in each group is to be read as one amount. For instance, in adding the encircled figures 8 and 2 they should be read as 10, the figures 3 and 6 should be read as 9, and the figures 1 and 5 should be read as 6. Grouping figures in this way will greatly increase speed in adding. The location of the figures in the different squares can be so arranged as to bring various combinations of figures together for grouping purposes. Three or more figures can be included in a single group if desired.

Proceed with the drill in addition, grouping certain figures, and continue the exercise for a few minutes.

LESSON 11 (*Continued*)

Oral Exercises

1. If merchandise which cost \$50 was sold for \$60, what was the profit? If it was sold for \$45, what was the loss?

2. If two horses were purchased for \$150 each and one was sold for \$135 and the other for \$180, what was the loss on the one and the gain on the other? What was the net gain on both?

3. If the *net returns from sales* for a given period were \$8200 and the *cost of the goods sold* was found to be \$5600, what was the amount of the difference and what does it show?

Purchases and Sales Problems

1. On December 31 the net returns from sales were found to be \$74365.47. The cost of this merchandise was found to be \$63989.87. What was the amount of the difference and what did it show?

Observe that if merchandise is sold for more than it cost the difference is a *profit*; if sold for less, the difference is a *loss*. As this profit or loss results from *trading* in merchandise it is known as the *gross trading profit* or the *trading loss*.

To find the gross trading profit or the trading loss, (a) find the *net returns* as instructed in lesson 7, (b) find the *cost of goods sold* as instructed in lesson 4 and (c) then deduct the cost from the net returns.

If the cost is greater than the net returns the difference is the *trading loss*.

2. The inventory January 1 was \$4872.23, the amount of purchases was \$37416.29, the inventory December 31 was \$5793.67, and the net returns from sales for the year were \$43314.67. Was there a gross trading profit or a trading loss, and what was the amount?

3. The inventory January 1 was \$32465.27, the total purchases were \$86743.79, the freight on purchases was \$578.22, the inventory December 31 was \$28479.65, and the net returns from sales were \$101780.37. What was the gross trading profit?

Purpose and Method: It will be seen that there is a gradual development of efficiency in rapid addition and other calculations in the lessons throughout the text corresponding with the development of the other features of the course of study. This is illustrated by the first exercises in grouping figures in this lesson. Another feature of this lesson is the introduction of the next step in the preparation of a complete trading statement, namely, the method of finding the gross trading profit.

LESSON 12

Purchases and Sales Problems

1. If the inventory January 1 was $2578.32, the purchases during the year were $16725.90, of which $1197.65 were returned, and if the freight paid on purchases was $273.12, what would the gross trading profit be if the inventory December 31 was $946.21 and the total sales were $19945.27?

2. A statement taken from a set of books at the close of the year showed the following facts: inventory of merchandise on hand January 1 was $5465, during the year the purchases were $27387.50, goods purchased were returned amounting to $496.25. There were other allowances amounting to $212.28, freight paid on purchases was $360.50. On December 31 the entire stock was disposed of and the total sales were $34315. What was the gross trading profit?

3. A plumber took stock January 1 and found it inventoried $4325.50. The purchases during the year were $7485. Of these purchases he returned $2165.75 and he paid drayage charges amounting to $218. His sales for the year, including the cost of materials used in his contracts, were $9428.27. Did he gain or lose and what was the amount?

4. A retail grocer had a statement prepared from his books showing the following results for the year ending December 31:

January 1 his goods on hand inventoried $3575.20. His purchases for the year were $9316.25. He paid freight and drayage charges amounting to $348.96. His total sales were $12928.70, but of these sales $242.75 were returned, and he had to make some allowances for damaged goods amounting to $122.12. At the end of the year, December 31, he had goods on hand which inventoried $4127.63. What was his gross trading profit?

5. If out of this gross trading profit he had to pay $600 rent and other expense items amounting to $395, how much was his own profit for the year's business?

Note: Problem 4 introduces some items which when deducted will give the grocer's *net profit*, which will be more fully explained later.

Purpose and Method: This lesson is merely an extension of the preceding lesson. Similar problems may be presented by the teacher if desired, which problems, however, should be stated in proper form and each problem as placed on the board should be criticised with regard to its arrangement as well as to its results. This is preliminary to the development of correct form appreciation which is so important in the later bookkeeping work.

LESSON 13

Suggestion: Drill exercises in addition.

Purchases and Sales Problems

1. A merchant's inventory January 1 was $53312.86. At the end of the year his inventory was $4728.12 less, his purchases during the year were $87590, his total sales were $99112.75 of which $743.60 were returned, and various rebates and allowances amounting to $428.80 were made. What was the gross trading profit on the year's business. If the inventory December 31 were $45780.75, what would have been the result?

2. A statement taken from the books of a grocer showed the following: purchases $47325, sales $38750, freight and drayage on purchases $87, purchases returned $217, sales returned $468, purchases discounts received $114, sales discounts allowed $94.75, and after the inventory was taken December 31 the gross profit was found to be $4550. What was the inventory? If there had been an inventory at the beginning of the year amounting to $5460, what would have been the result?

3. The books of Wm. Park, a drygoods merchant, showed the following: the inventory January 1 was $28712.45, the cost of purchases for the year was $96453.72, the purchases returned $785.17, rebates and allowances on purchases $545.68, warehouse supplies for the year $453.80, warehouse labor $1175, inventory December 31 $27316.83. Gross sales were $114375.90, sales returned were $214.23 various rebates and allowances on sales were made amounting to $535, cash discounts were allowed amounting to $1625. Purchase discounts were secured amounting to $212. Find the gross trading profit and arrange the solution so as to show what each amount represents.

Purpose and method: This lesson introduces additional items which will enter into the preparation of the trading statement. Be careful to get the arithmetical viewpoint thoroughly fixed before the statement itself is considered.

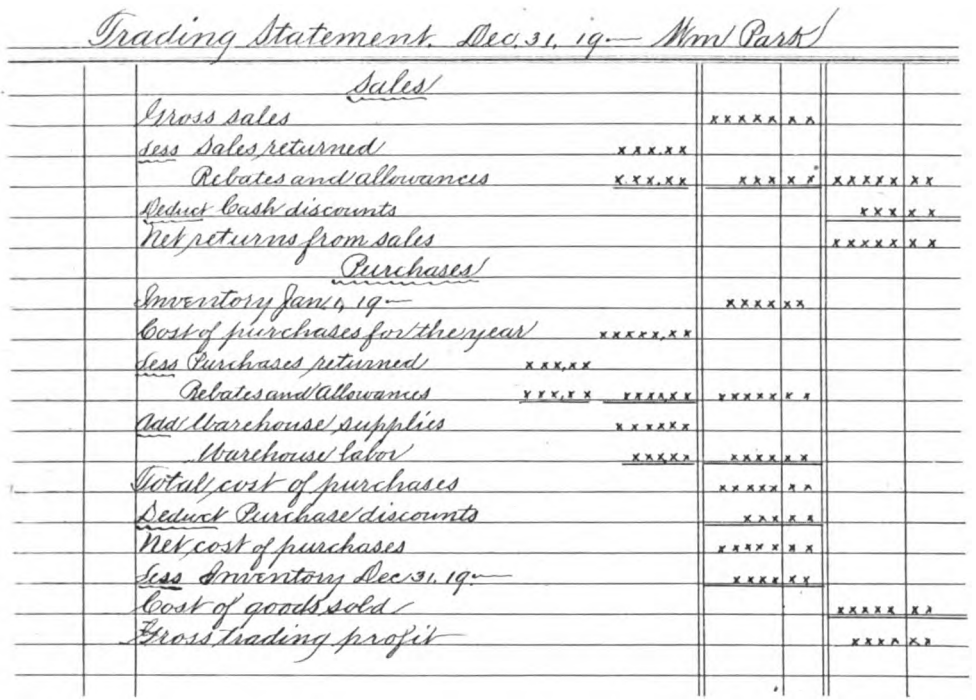
Purpose and method of lesson 14: In this lesson we have the completed trading statement. Notice that it conforms in every particular with the established form of the trading statement. Thus we see that such a statement is simply a proper arrangement of certain arithmetical facts stated in the form of a problem to obtain the final result known as the *gross trading profit.* This, with the preceding twelve lessons, is an interesting illustration of the inductive method of developing a subject. It should always be remembered, however, that the conclusions of induction should always be tested by analysis.

LESSON 14

PREPARING TRADING STATEMENTS

1. From the solution of question 3, lesson 13, write a trading statement like the illustration shown below and enter the amounts in the proper spaces.

ILLUSTRATION 11



2. J. S. Dane's books showed the following results: inventory January 1 $6964.63, cost of purchases for the year $36975.41, purchases returned $4831.57, rebates and allowances on purchases $623.85, warehouse supplies $254.06, warehouse labor $705, inventory December 31 $7178.99, gross sales $39365.12, sales returned $443.17, sales rebates and allowances $86.35, sales discounts allowed $270.10. Prepare a statement similar to the one above showing the net cost of purchases, the net cost of goods sold, the net returns from sales, and the gross trading profit for the year. If you are in doubt as to the form of statement, refer to illustrations 9 and 7.

If in the preceding business Mr. Dane's expenses for rent, light, heat, and such other expenses as were necessary in carrying on his business had cost him $3445.50, what would have been the *net profit* remaining?

Observe that as indicated in the preceding problem, the *net profit* is the gross profit less any expenses necessary in carrying on the business.

LESSON 15

Oral Problems

1. If the gross trading profit was $4500 and the expense of conducting the business was $2500, what was the net profit?

2. If $750 was paid for rent and $350 for other expenses and the gross trading profit for the year was $1800, what was the net profit for the year?

3. On December 31 a grocer, after preparing a statement from his books, found his gross trading profit to be $5500. From this he had to deduct $800 paid for rent, $290 paid for light and heat, $600 paid for clerk hire, and $300 paid for delivery of goods. What was his net profit after deducting these amounts?

Note: Additional problems of this type may be used.

Profit and Loss Problems (No statements are required)

1. After taking an inventory at the end of the year Mr. B prepared a statement which showed that his gross trading profit for the year amounted to $17450.54. His expenses were as follows: bookkeeper's salary $1400, clerks' salaries $2300, delivery expenses $1160, rent $2000, janitor service $475, and sundry items of general expense $3525. What was his net profit for the year?

2. The books of a retail store showed the following results: purchases $8454.75, inventory January 1 $1639.87, inventory December 31 $1745.56, and the total sales were $10048.20. What was the proprietor's net profit after he paid various expenses amounting to $1450?

3. A shoe repairing establishment bought supplies amounting to $3475 during the year. At the end of the year the supplies on hand amounted to $1250.60. During the year the receipts for repairing shoes were $6745.40. The expenses for rent, light, heat, etc., were $785.75. If there were two partners how much profit did they have to divide between them, and what was each one's share if it was divided equally?

4. The gross trading profit of a hardware store was $16575.25, the rent was $2600, the delivery expenses were $1480, and other expenses including postage, telegrams, telephone bills, janitor service, insurance, etc., amounted to $5445. During the year the salaries and clerk hire amounted to $8400. Was the business a profitable one? What was the amount of the net gain or the net loss?

5. A and B conducted a business in which they purchased goods during the year amounting to $22475. There was no inventory at the beginning or the end of the year. They sold this merchandise for $28550, but they had expenses amounting to $450. They decided to each withdraw $2500 from their profits. How much of the net profits of the partners remained to be divided?

Purpose and method: The purpose of this lesson is quite apparent. It is to acquaint the pupil with what is meant by *net profit*, and how it is found when the gross trading profit is given.

LESSON 16

Skill in subtracting may be acquired in connection with the addition drills if the teacher points to the sign of subtraction in the left margin of the diagram before pointing to the next figure, which indicates to the student that it is to be subtracted instead of added. The figures subsequently pointed to will be subtracted until the teacher points to the addition sign.

Suggestion: Drill exercises in addition, subtraction, and multiplication.

Some Exercises in Preparing Trading and Profit and Loss Statements

In the preceding lessons the student has had all of the problems involved in the preparation of a trading and profit and loss statement. This is one of the most important statements that is prepared by the bookkeeper or accountant. It is usually prepared at the close of each fiscal period, which is in most cases one year, although such fiscal period may be any other unit of time determined upon, such as one month, one-half year, etc. The statement is made up from the results shown by the accounts in the system of bookkeeping employed. This statement is particularly valuable and important because it shows in detail the incomes and expenses of the business. It is from the information in this statement that the policy and management, as well as the economic administration of the business, are largely determined.

The trading and profit and loss statement performs another very important function in business management in providing the data from which comparisons are made with the results shown by similar statements for previous fiscal periods. These comparisons are indispensable to intelligent management in many lines of business.

Oral Exercises

1. If the net profit was $1800, to be shared equally by three partners, what would each receive?

2. If the gross trading profit was $6000 and the expenses were $1500, what was the net profit? If there are two partners, one with a two-third interest and the other with a one-third interest in the business and profits, what was each one's share of the net profits?

3. If the gross trading profit was $4500 and the expenses were $2000, and there were three partners, two of them each entitled to two-fifths and the other to one-fifth of the profits, what was each partner's share?

LESSON 16 (*Continued*)

SOME EXERCISES IN PREPARING TRADING AND PROFIT AND LOSS STATEMENTS

1. Dixon & Son conducted a clothing business. At the close of the year their books showed the following: sales for year $63175.36, sales returned $467.27, inventory at the beginning of the year, January 1, $7843.76, purchases for the year $52721.15, purchases returned during the year $1956.88, inventory at the close of the year, December 31, $5961.90. The expenses for the year were as follows: rent, light and heat $1568.50, insurance $240, advertising $2600.68, general and office expense $465, clerk and office salaries $1875.50. What was the net profit for the year to be divided between the proprietors? Prepare a trading and profit and loss statement like the following illustration, entering the amounts in their proper places.

ILLUSTRATION 12

Trading and Profit and Loss Statement Dec. 31, 19— Dixon & Son

Returns			
Sales for the year			
Less Sales returned			
Net returns from sales			
Costs			
Inventory Jan. 1, 19—			
Purchases for the year			
Less Purchases returned			
Total cost of purchases			
Less Inventory Dec. 31, 19—			
Net cost of goods sold			
Gross trading profit			
Expenses			
Rent light and heat			
Insurance			
Advertising			
General and office expenses			
Clerk and office salaries			
Net profit for the year			

Some variation in placing the amounts in the above illustration is shown if it is compared with illustration 11, p. 17. This is caused by certain items appearing in one statement that do not appear in the other.

It is very important that the student should realize that there is no one particular set form for preparing the trading, the profit and loss, or any other statement of the affairs of a business.

LESSON 17

TRADING AND PROFIT AND LOSS STATEMENTS (*Continued*)

Each statement should be so arranged that it will supply in detail the *exact information desired*, consequently, while a general uniformity will be observed in all the different statements illustrated in this work, it will be seen that they vary considerably, such variations being determined by the nature of the information desired.

An unusual opportunity to exercise originality and develop constructive ability is offered through a careful study of statements and their forms, and particularly in the preparation of such statements.

Ward & Watson, furniture dealers, are equal partners. Their inventory January 1 was $27944, their inventory December 31 was $31336.75, their purchases during the year were $84712.25, purchases returned were $725, the total sales amounted to $126354.50, sales returned $5922.80, rent, light and heat $9800.95, insurance $750, advertising $8565.56, general and office expenses $4582.17, and clerk and office salaries $5784.50. What was the net profit and what was each partner's share? Prepare a statement similar to the above.

SOME PROBLEMS REVERSED TO FIX THE RELATION OF QUANTITIES

These are purely drill exercises. The quantities required are always known in practical problems. The gross trading profit, which is given, is always the quantity that is to be found in practical problems.

1. If the gross trading profit was $735.25 and the net returns from sales were $4373.20, what was the cost of the goods sold?

2. If the cost of goods sold was $2178.45 and the gross trading profit was $436.18, what were the net returns from sales?

3. If the gross trading profit was $1236.80, the net returns from sales $8750.60, and the value of inventory on hand was $3265, what were the total purchases for the period?

4. If the inventory at the beginning of the year was $375.20, the purchases for the year were $11412.60, and the cost of goods sold for the year was $9372.92, what was the value of the inventory at the close of the year?

5. A store was destroyed by a fire July 4. The value of the inventory January 1 preceding was $8563, the purchases up to the time of the fire were $29784.60, the sales were $41248.95, and the selling price of the goods was 25% above the cost price. What was the value of the goods on hand at the time of the fire?

NOTE: Find the cost price of the goods sold by taking four-fifths of the selling price.

Purpose and method: These lessons demonstrate the real simplicity of the profit and loss statement, how easily it may be taught, and how easily it may be understood by the average pupil. If additional exercises in the preparation of trading and profit and loss statements seem necessary, similar problems involving the same items but with different amounts may be prepared readily by the teacher.

LESSON 18

Suggestion: Drill exercises in addition, subtraction, multiplication, and division.

Oral Exercises

1. Mr. A's profit at the close of the year was $4200. During the year he had taken out as salary $2400. After deducting this amount from his profits, what was the remainder or net profit?

2. The net profit was $4800. Mr. B's personal account had been charged during the year with sums he had withdrawn amounting to $3700. How much of his net profit remained to be withdrawn?

3. Messrs. C and D were partners. According to their agreement C had withdrawn $2000 while D had withdrawn $1500. The remainder of the net profits was to be divided equally between them. The net profit was $5000. What amount was divided between them and how much did each receive?

Some Exercises in Preparing Trading and Profit and Loss Statements

1. Hart Brothers and Company are wholesale grocers. Their trading and profit and loss statement at the close of the year showed the following results:

Under the head of "Returns" the gross sales for the year were $227156.75, goods returned $13567.54, rebates and allowances $2723.68, sales discounts $1746.68.

Under the head of "Costs" were the following items: inventory January 1 $56782.18, purchases for the year $164523.63, purchases returned $3245.15, rebates and allowances $519.60, warehouse supplies $1875.20, warehouse labor $3657.50, purchase discounts $3748.96, inventory December 31 $55387.60.

Under the head of "Expenses" were: selling expenses including advertising, salesmen's salaries, delivery expenses, traveling expenses, etc., $11485.94, administrative expenses including manager's and office salaries, office supplies, etc., $8742.45, general expenses including rent, light, heat and insurance $5865.61.

The firm consisted of Geo. R. Hart, M. G. Hart, and James Bates, each entitled to one-third of the net profits. What were the net sales, net returns from sales, total cost of purchases, net cost of purchases, cost of goods sold, gross trading profit, total expenses, and net profit for the year? What was each partner's share of the net profit? Prepare a trading and profit and loss statement like the following illustration, entering the amounts in their proper places.

Illustration 13

Trading and Profit and Loss Statement Dec. 31, 19— Hart Bros. & Co.

	Returns				
Gross sales for year			xxxxxx		
Less Goods returned	xxx.xx				
Rebates and allowances	xx.xx		xxx	xx	
Net sales					xxxxxx xx
Deduct Sales discounts					xxx xx
Net returns from sales					xxxxxx xx
	Costs				
Inventory Jan. 1, 19—			xxx	xx	
Purchases for the year	xxxx.xx				
Less Purchases returned	xxxx				
Rebates and allowances	xxxx	xxx.xx	xxxx	xx	
Add Warehouse supplies	xxx.xx				
Warehouse labor	xxxx		xxxx	xx	
Total cost of purchases			xxxxx	xx	
Deduct Purchase discounts			xxx	xx	
Net cost of purchases			xxxxx	xx	
Less Inventory Dec. 31, 19—			xxx	xx	
Cost of goods sold					xxxxx xx
Gross trading profit					xxxxx xx
	Expenses				
Selling expenses — advertising, salesmen's salaries, delivery expenses, traveling expenses, Etc			xxxx	xx	
Administration expenses — manager's and office salaries, office supplies, etc,			xxxx	xx	
General expenses — rent light heat and insurance			xxxx	xx	xxxx xx
Net profit for the year					xxxxx xx
Geo. K. Hart 1/3			xxxx	xx	
M. G. Hart 1/3			xxxx	xx	
Jas. Bates 1/3			xxxx	xx	
			xxxxx	xx	xxxxx xx

LESSON 19

Preparing a Trading and Profit and Loss Statement

Prepare a trading and profit and loss statement dated December 31 for A. R. Eaton & Co., a firm consisting of three partners, whose books showed the following results:

Gross sales for the year $12346.60, goods returned $7327.86, rebates and allowances on sales $921.26, and sales discounts $2328.70.

Inventory January 1 $28927.36, purchases for the year $73584.25, purchases returned $824, rebates and allowances $1128.17, warehouse supplies $1650.65, warehouse labor $2125, purchase discounts $2265.84, inventory December 31 $32125.78. The various expenses were as follows: selling expenses—advertising, salesmen's salaries, delivery expenses, traveling expenses, etc., $8527.96; administrative expenses—partners' and office salaries, office supplies, etc., $12246.18; general expenses—rent, light, heat, insurance, etc., $3750.

What was the net profit for the year to be distributed among the partners, and what was each partner's one-third? If the inventory on hand December 31 had been $10000 less and the total expenses $5000 greater, how would the results shown by the trading and profit and loss statement have been affected?

Note: In some instances it may be necessary to devote two periods to this lesson because each item should be carefully analyzed and the form of the statement carefully considered.

Comment: The annual, semi-annual, quarterly or monthly trading and profit and loss statement is invaluable to the manager of a business because it permits him to make a comparison between the results of the last period with previous similar periods. For instance, if the gross trading profit for one period was $23000 and for the next period only $19000 on practically the same total sales, it would at once indicate to him that something was wrong. The selling price might be too low, warehouse expenses or freight rates may have increased. In any event the drop in the amount of gross trading profit would act as a barometer, showing him a change in conditions which he should, of course, immediately investigate.

In like manner, a profit and loss statement showing any radical differences in the amounts of the various expenses of conducting the business and of the net profit at the close of the period would quickly reveal to the business manager upon investigation why the differences exist and if they should not exist they can be remedied if possible.

The relative cost of each item of expense necessary to sell goods is worked out on a *percentage basis* which will be explained later in the course.

LESSON 20

Suggestion: Drill exercises using chart.

Listing Purchases

Purchase bills are usually listed in a book known as the *purchases book.* This is done in order to ascertain the cost of purchases for the month, year, or other fiscal period.

The form of a bill is shown in the illustration below. Such a bill gives the name of the buyer and the seller, the date on which the bill was issued, and the terms of sale, followed by a list of the items of merchandise purchased showing the quantity, price, and total amount of the purchase. This bill is made out by the seller and passed to the buyer.

If the bill is purchased "terms cash," it means that cash payment is to be made as soon as the goods are received and the bill has been found to be correct. If the terms are "on account," (written, on %) it means that no definite time is fixed for payment. If however the terms are "on account 5 days," (written, % 5 ds.) "% 10 ds.," "% 30 ds.," or "% 60 ds.," or if any other definite time is stated, it means that the bill is due at the expiration of that time, and that it should be paid on or before the expiration of the time stated.

Illustration 14

Rochester, N.Y. Dec 28, 19

Mr John Abatters. 200 Chestnut St.

Bought of P. FORD & CO. INCORPORATED Philadelphia Pa

✓	202 doz Eggs.	✓	.20	✓ 40 40	
✓	200 lbs Butter.	✓	.32½	✓ 65	✓ 105 40

Before bills are listed in the purchases book, they should be carefully checked with the goods received to see that they agree with the bill, that the prices are correct, and that the amounts have been properly extended and footed.

LESSON 20 (*Continued*)

The first entry in the illustration of the purchases book shown below is made from the above bill. All the entries in the purchases book should be made from the bills received. Similar bills were received for the other entries shown in the purchases book but they are not illustrated, the purpose at this time being to concentrate the attention of the student upon the form of the purchases book and the entries made therein.

Exercises in Listing Purchases

1. The following bills for purchases were received, on the dates named, checked up, and found to be correct, by John Walters, Philadelphia, Pa., during January:

Jan. 3 from C. P. Ford & Co., Rochester, N. Y., bill of December 28, terms on %, $105.40; – – Jan. 9 Samuel Wood, Chambersburg, Pa., bill of January 5, % 10 ds., $93.25; – – Jan. 15, C. P. Ford & Co., bill of January 10, on % $155.47; – – Jan. 21, August Sykes, Hanover, Pa., bill of January 17, % 10 ds., $85.32; – – Jan. 27, William Jones, York, Pa., bill of January 22, terms cash, $122.50; – – Jan. 30, Samuel Wood, bill of January 26, % 10 ds. $45.85. Make the entries for these bills as they would appear in John Walters' purchases book as shown in the following illustration, footing and extending the total purchases for the month.

Illustration 15

Purchases Book

19–						
Jan.	3	C. P. Ford & Co.	Rochester N.Y.			
			Dec. 28, On a/c		105	40
	9	Samuel Wood	Chambersburg Pa.			
			Jan. 5, On a/c 10 days		93	25
	15	C. P. Ford & Co.	Jan. 10, On a/c		155	47
	21	August Sykes	Hanover Pa.			
			Jan. 17, On a/c 10 days		85	32
	27	William Jones	York Pa.			
			Jan. 22, Cash		122	50
	30	Samuel Wood	Jan. 26, a/c 10 days		45	85
		Total purchases				607 79

Note: The check marks to the left of the prices, the amounts, and the total on the bill, illustration 14, are known as proof checks and indicate that the different amounts stated are correct. It means, in other words, that the items called for on the bill were received, that the prices quoted are correct, that the amount of each item is correct, and the total amount is correct.

Answer the following questions:

(*a*) What were the total purchases for the month? (*b*) If none of the bills were paid, how much does Mr. Walters owe? (*c*) How much is owed to C. P. Ford & Co.? (*d*) To Samuel Wood? (*e*) If Ford & Co. and Wood's bills were paid how much would still be owed? (*f*) If in addition Wm. Jones' bill of January 22 "terms cash," was paid on the date it was received and entered, what is the amount owed? (*g*) If only those bills whose terms state definitely when they were due, % 10 ds., cash, etc., were paid on or before the time they were due, what was the amount still owed? Prepare answers to these questions as shown below.

ILLUSTRATION 16

Answers to Problem 1, page

(a) $607.79 (b) 607.79 (c) 105.40 + 155.47 = 260.87 (d) 93.25 + 45.85 = 139.10

(e) 260.87 − 139.10 = 121.77; 399.97 − 121.77 = 278.20; 607.79 − 278.20 = 329.59; 207.82 − 329.59 = 122.50 − 85.32 = 37.18

(f) 93.25 + 85.32 = 178.57; 112.50 + 178.57 = 291.07; 301.07 − 291.07 = 10.00; 607.79 − 10.00 = 597.79; 306.72 − 597.79 = 291.07

NOTE: In many instances it reduces work to deduct a lesser number from a greater number by writing the greater number under the lesser as shown in (*e*) and (*g*).

Purpose and method: This lesson suggests the next important step in the development of our subject. In the previous lessons the problems were made up of totals taken from the various accounts to which had been posted the footings of the different books in which the transactions of the business were recorded. We are now ready to acquaint the student with these transactions of business and with the books in which they are classified and recorded. Each class of transactions is considered separately in order to simplify the student's work. "Listing" is a simpler word than "classification," therefore it is used until later on when the more technical terms of bookkeeping and accountancy are introduced. The form of a bill is shown wholly for illustrative purposes. The information concerning bills should be carefully considered and discussed and it should be frequently referred to for review. The different terms of credit and the method of finding the due date of each bill should have attention.

The questions asked should have careful attention because they lay the groundwork for a later understanding of personal and other accounts affected. The responsibilities of the buyer and of the seller should be emphasized though not in terms of debit and credit, but instead in the sense of *owing* and *being owed*. Do not at this time designate either party to a transaction as a debtor or a creditor. That will come later. Insist that answers to questions be stated clearly and in the fewest words, using as nearly as possible the precise language of the text. Require that written answers be stated as nearly as possible as shown in the illustration.

LESSON 21

Listing Purchases

1. John P. Johnson & Co. of Pittsburgh, Pa., made the following purchases during February. Make the purchases book entries.

Feb. 2, William White, Braddock, Pa., bill Jan. 30, % 15 ds. $67.50; – – Feb. 8, Walter Mason, Greensburg, Pa., bill Feb. 4, % 10 ds., $123.85; – – Feb. 16, C. M. Marshall, Scottdale, Pa., bill Feb. 11, % 30 ds. $221.19; – – Feb. 27, William White, bill Feb. 19, % 5 ds., $116.50; – – Feb. 27, C. M. Marshall, bill Feb. 23, terms cash, $56.15; – – Feb. 28, William White, bill Feb. 26, % 10 ds. $21.39.

Answer the following questions: (*a*) What were the total purchases for the month, and if none of the bills were paid how much cash must Johnson & Co. have on hand to pay what they owe? (*b*) How much is owed to William White? (*c*) How much is owed to Walter Mason? (*d*) How much is owed to C. M. Marshall? (*e*) Ascertain and write down the due date of each bill. (*f*) If all the bills were paid when due, at the end of the month what was the total amount of the bills paid, and what was the total amount of the bills remaining unpaid? Prepare answers as shown in lesson 18.

Purpose and method: The purpose of having the answers to problems prepared in neat, properly arranged form as shown in illustration 16 is to form from the start the habit of orderly and systematic arrangement, neatness in execution, and rapidity of solution, which are necessary in the training of a successful bookkeeper or accountant. You should insist upon the very best work the student is capable of doing, remembering that it is not the amount of work alone but *how well* it is done that counts. Where the time is not sufficient for the completion of both problems in this lesson the first may be used for illustration and analysis purposes and the second as an exercise in preparing a similar purchases book record and answers to the questions asked. This suggestion applies to such other lessons as contain more matter than can be disposed of in one recitation period. Where homework is expected much of the written work can be prepared outside of school hours which will give the entire recitation period for analysis and discussion.

Comment: Those who check up, prove, and enter purchase bills are known as invoice clerks or entry clerks. When a bill is received it is held until the goods have come in to see that all of the items called for have been received. The prices are then compared with the prices at which the goods were ordered. The extension of each item on the bill is next recalculated and if an error has been made in any of the extensions they are at once reported to the one issuing the bill with a request for a corrected bill.

After the bill has been found to be correct in every particular it is then entered in the purchases book. Each bill is then properly filed for any future reference to it that may be necessary.

Notations of the amount of freight, express, drayage, or other charges necessary to place the goods on the shelves are frequently made upon the bill so that they may be added to the invoice price of the bill in determining upon the selling prices of the various items included in the bill.

LESSON 22

Some suggestions for the extension of drill exercises in addition, subtraction, multiplication, and division to include short methods.

1. In addition exercises the grouping of figures as shown in illustration 10 should be emphasized.

2. Dictate problems in multiplication to include the following short methods:

(*a*) When either factor (multiplicand or multiplier) ends in a number of ciphers, multiply the numbers as usual, omitting the ciphers, and then add to the product the number of ciphers in one or both factors as the case may be.

Ex. 2300 × 1200 = 23 × 12 = 276 and adding four ciphers = 2760000—product.

(*b*) When the multiplier is 11 write the first degree figure of the multiplicand as the first figure of the product, the sum of the first and second figures of the multiplicand for the second figure of the product, the sum of the second and third figures of the multiplicand, carrying as usual, for the third figure of the product and proceed in like manner until all the figures of the multiplicand are included.

Ex. 947 × 11 = 10417—product.

(*c*) When the multiplier is a multiple of 11, such as 33, 77, etc., proceed as when multiplying by 11 and multiply that product by the number of times the multiplier contains 11.

Ex. 4793 × 55 = 12723 × 5 = 63615—product.

(*d*) When the multiplier is within 10 more or less of 100, 1000, 10000, etc., add the number of ciphers in the 100, 1000, 10000, etc., nearest the multiplier, multiply the multiplicand by the difference between the multiplier and whichever one of the three numbers is nearest it, and then add or subtract that number from the first number after the ciphers are added. The result will be the correct product.

Ex. 327 × 995 = 327000 less 327 × 5, or 327000 less 1635. In this operation but three amounts should be written, i.e., 327000, 1635, and the product.

(*e*) When a multiplier is an equal factor of 100, 1000, 10000, etc., add the number of ciphers contained in 100, 1000, 10000, etc., and divide by the number of times the multiplier is contained in 100, 1000, 10000, etc.

By this method the multiplicand after being increased by 100 or 1000 times itself is then diminished in the proportion that the multiplier is to 100 or 1000.

Ex. Multiply 496 × 25. 25 is $\frac{1}{4}$ of 100. 496 increased by the addition of two ciphers equals 49600, divided by 4 equals 12400, the product.

NOTE: Particular attention is called to the above method (*e*) since it lays the foundation of the method of calculating by aliquot parts. The aliquot part method is but an extension of short methods in multiplication and it is further extended by short methods of division.

LESSON 22 (*Continued*)

3. The following are aliquot parts of 100 in common use:
$12\frac{1}{2}$ is contained in 100 *eight* times; it is $\frac{1}{8}$ of 100.
$16\frac{2}{3}$ is contained in 100 *six* times; it is $\frac{1}{6}$ of 100.
25 is contained in 100 *four* times; it is $\frac{1}{4}$ of 100.
$33\frac{1}{3}$ is contained in 100 *three* times; it is $\frac{1}{3}$ of 100.

EXAMPLES

Multiply 160 x 30; 125 x 60; 1300 x 40; etc.
Multiply 136 x 11; 183 x 11; 2475 x 11; etc.
Multiply 768 x 33; 1876 x 77; 32112 x 55; etc.
Multiply 125 x 97; 323 x 101; 1280 x 105; etc.

NOTE: A good part of one recitation period should be given to the preceding exercises because rapidity in calculation will be more and more required as the student proceeds.

EXERCISES IN LISTING PURCHASES

1. Reynolds & Foster, Columbus, Ohio, made the following purchases during March for which bills were received, checked up, and found to be correct. Make the purchases book entries.

Mar. 1, Oscar Green, Dublin, O., bill Feb. 26, % 30 ds., $95.42; – – Mar. 4, F. B. Martin, Hilliard, O., bill Mar. 2, % 30 ds., $116.90; – – Mar. 10, Louis Holmes, Granville, O., bill Mar. 7, % 30 ds., $248.86; – – Mar. 13, F. B. Martin, bill Mar. 11, % 30 ds., $86.92; Mar. 18, Benjamin King, Darbyville, O., bill Mar. 15, % 15 ds., $172.45; Mar. 21, Oscar Green, bill Mar. 18, % 30 ds., $138.65; Mar. 26, F. B. Martin, bill Mar. 23, % 10 ds., $215.67; Mar. 29, M. O. Baker, Westerville, O., % 15 ds., $44.70.

Answer the following questions: (*a*) What were the total purchases for the month? (*b*) Determine the due date of each bill and make a list of bills giving the date the bill was received, the name of the seller, the date of the bill, the terms, the amount, and the due date, on an unruled sheet of paper. (*c*) If each bill was paid on or before the expiration of its term of credit, what bills and their amounts were paid at the end of the month, and what bills and their amounts remained unpaid? (*d*) What were the total purchases for the month from Oscar Green and what amount was due him at the end of the month? (*e*) What was the amount of purchases from F. B. Martin and what amount was owing to him at the end of the month?

Purpose and method: This lesson introduces various *short methods in multiplication* preparatory to a series of drills in calculating by the use of aliquot parts. They should be referred to continuously until the student is thoroughly familiar with them. Lessons 18, 19, and 20 are full of new features. "Listing purchases" shows where the principal item entering into the cost of purchases comes from. What it means to *owe* or to be *owed*, and *who* owes and *who* is owed are fundamentals which should begin to be clear to the pupil.

LESSON 23

Suggestion: In calculation drills give special attention to the short methods suggested in paragraphs (2*a*) and (2*b*) in lesson 22.

Exercises in Listing Purchases

1. Fayne & Harper, San Francisco, Cal., received bills for the month of April as stated below:

Apr. 2, C. J. Gardner, Lincoln, Cal., bill Mar. 28, terms cash, $125.60; – – Apr. 3, Andrew Huntley, Rocklin, Cal., bill Mar. 31, % 15 ds., $97.23; – – Apr. 4, M. G. Clark, Natoma, Cal., bill Apr. 2, % 30 ds., $131.50; – – Apr. 6, Andrew Huntley, bill Apr. 2, % 15 ds., $56.69; – – Apr. 7, Clyde Arnold, Freeport, Cal., bill Apr. 4, % 60 ds., $184.47; – – Apr. 9, W. E. Dixon, Woodland, Cal., bill Apr. 6, terms cash, $217.98; Apr. 10, M. G. Clark, bill Apr. 7, % 10 ds., $76.14; Apr. 12, C. J. Gardner, bill Apr. 9, terms cash, $158.45; Apr. 13, J. B. Bronson, Linden, Cal., bill Apr. 11, % 10 ds., $137.50; Apr. 14, Clyde Arnold, bill Apr. 12, % 30 ds., $128.66; Apr. 16, Andrew Huntley, bill Apr. 13, % 15 ds., $368.75; Apr. 18, W. E. Dixon, bill Apr. 14, terms cash, $48.35; Apr. 19, Adolph Myers, Ronda, Cal., bill Apr. 17, % 30 ds., $214.47; Apr. 21, C. J. Gardner, bill Apr. 18, terms cash, $225.60; Apr. 23, Andrew Huntley, bill Apr. 20, % 15 ds., $56.25; Apr. 24, J. B. Bronson, bill Apr. 21, % 30 ds., $50.00; Apr. 26, Thomas C. Grove, Allendale, Cal., bill Apr. 23, terms cash, $82.95; Apr. 27, Andrew Huntley, bill Apr. 26, % 15 ds., $126.65; Apr. 28, W. E. Dixon, bill Apr. 25, terms cash, $27.85; Apr. 28, C. J. Gardner, bill Apr. 26, % 10 ds., $214.72; Apr. 30, M. G. Clark, bill Apr. 28, % 60 ds., $91.20. Make the purchases book entries.

Analyze the above purchases by answering the following questions:

(*a*) Determine and write the due date of each purchase. (*b*) Ascertain the total purchases for the month. (*c*) Show the total purchases from Gardner, Huntley, Clark, Arnold, Dixon, and Bronson. (*d*) If Gardner's bills were paid when due how much, if any, is owing to him; how much to Huntley; to Clark; to Dixon; to Bronson? (*e*) If $65.75 worth of goods purchased from Arnold on April 4 were returned to him, what is the balance owing to him on that bill; on both bills purchased? (*f*) Which of the bills purchased from him will be paid first? (*g*) Which of Clark's bills will be paid first and which last? (*h*) If Huntley made an allowance on his bill of April 13 for damaged goods amounting to $23.33, what would be the balance owing on that bill when paid on the date of its maturity, and what would be the balance owing to Huntley on other bills on that date? (*i*) If all bills were paid when due, what bills would remain unpaid at the end of the month and what was their amount?

Purpose and method: The listing of the purchases is important. Their analysis as required in answering the questions is more important since this familiarizes the pupil with many of the fundamental facts involved in the more formal bookkeeping processes which he will be required to consider later on.

LESSON 24

Suggestion: In calculation drills give special attention to the short methods suggested in paragraphs (2*c*), (2*d*) and (2*e*) in lesson 22.

Exercise in Listing Purchases

1. The Jersey City Produce Company received the following bills during the month of May which were checked and O.K.'d for record. Make the proper entries in the purchases book. The due date of each bill may be entered in the right hand money column for convenience. The bills were as follows:

May 1, Robert Ralston, Mt. Holly, N. J., bill Apr. 28, % 30 ds., $146.85; – – May 2, J. B. Franklin, Locust Grove, N. J., bill Apr. 29, % 15 ds., $219.36; – – May 3, Peter Carr, Turnersville, N. J., bill May 1, % 60 ds., $172.25; – – May 5, Wm. B. Fields, Woodbury, N. J., bill May 3, % 15 ds., $263.89; – – May 7, Peter Carr, bill May 4, % 30 ds., $114.75; – – May 8, Robert Ralston, bill May 5, % 15 ds., $321.76; – – May 9, Henry Nagle, Fishing Creek, N. J., bill May 7, % 30 ds., $87.55; – – May 10, Wm. B. Fields, bill May 7, % 60 ds., $193.60; – – May 11, J. B. Franklin, bill May 9, % 30 ds., $269.80; – – May 12, Robert Ralston, bill May 8, % 30 ds., $132.72; – – May 14, S. E. Stewart, Hammonton, N. J., bill May 10, % 30 ds., $278.35; – – May 15, J. B. Franklin, bill May 12, % 30 ds., $56.60; – – May 16, Wm. B. Fields, bill May 14, % 20 ds., $314.75; – – May 18, Henry Nagle, bill May 16, % 60 ds., $82.65; – – May 18, Robert Ralston, bill May 17, % 10 ds., $105.03; – – May 19, D. G. Ward, Vineland, N. J., bill May 17, % 60 ds., $156.80; – – May 21, Peter Carr, bill May 19, % 20 ds., $43.75; – – May 22, S. E. Stuart, bill May 21, % 10 ds., $319.50; – – May 24, B. A. Marshall, Cape May, N. J., bill May 22, % 10 ds., $163.28; – – May 25, Robert Ralston, bill May 23, % 50 ds., $131.25; – – May 28, Peter Carr, bill May 26, % 20 ds., $73.85; – – May 29, Robert Ralston, bill May 26, % 2 mo., $238.46; – – May 31, Wm. B. Fields, bill May 29, % 30 ds., $147.50.

Questions

(*a*) List the total purchases from each party from whom bills were received. (*b*) If all bills were paid when due, list the amounts owing to those whose bills remain unpaid at the end of the month, stating separately the amount owing to each. (*c*) If one-fourth of the goods purchased from J. B. Franklin per his bill of May 9 were returned to him for credit, what would be the balance owing on that bill, and what would be the total balance owing to Franklin at the end of the month? (*d*) If Henry Nagle made an allowance of $3.40 for the prepayment of his bills of May 7 and 16, what was the amount of cash paid in full settlement of his bills? (*e*) Wm. B. Fields made an allowance of $16.50 for rancid butter included in his bill of May 14. What was the net balance owing on his bills at the end of the month? (*f*) What were the total purchases for the month? (*g*) What would be the net cost of purchases after deducting the value of merchandise returned and the rebates and allowances made?

Purpose and method: This lesson is but a continuation of lesson 21, with some new features. Remember, it is *quality*, not quantity, that is wanted.

LESSON 25

Suggestion: In calculation drills develop the aliquot parts method as rapidly as possible, giving attention to the aliquot parts in common use as set forth in paragraph 3, lesson 22.

Listing Sales

Sales bills are usually listed in a book known as a *sales book* just as bills of purchases are listed in a purchase book, as you were informed in lesson 20.

It will be observed that while in the purchases book the items were omitted, in the sales book the entries include the items, the price, and the amount of each item of merchandise sold. The reason for this is that bills received with goods purchased may be referred to at any time for amounts, prices, etc., while this source of information is not available for goods sold since sales bills pass from the seller to the buyers.

The due dates and terms of settlement of sales are ascertained exactly as for purchases. It should be remembered that while each line of business has its general terms on which goods are sold, each particular transaction *is a matter of contract* between seller and buyer. While terms of sale are usually fixed by the seller, they are not binding until they are accepted by the buyer and they may be, and not infrequently are, modified to meet his wishes. These matters will be discussed at greater length later in the course.

Exercises in Listing Sales

1. The following sales were made during January by the Pensacola Grocery Co., Pensacola, Fla.:

Jan. 2, Charles Wagner, 23 Front St., % 10ds., 100 bu. Oats @ 70¢, $70; - - Jan. 6, R. L. Moore, Brent, Fla., % 10 ds., 50 bu. Wheat @ $1.10, $55; - - 60 bu. Corn @ 90¢, $54; $109; - - Jan. 15, Platt & Co., Milton, Fla., % 30 ds., 40 bu. Oats @ 75¢, $30; - - 25 bu. Corn @ 90¢, $22.50; - - 30 bu. Wheat @ $1.10, $33.00, $85.50; - - Jan. 21, Charles Wagner, % 10 ds., 125 bu. Corn @ 90¢, $112.50; - - 20 bu. Wheat @ $1.15, $23, $135.50; - - Jan. 27, B. B. Dickson, 102 Orange Ave., terms cash, 150 bu. Oats @ 70¢, $105; - - 60 bu. Corn @ 95¢, $47.50, $152.50.

The bill issued by the Pensacola Grocery Company for the sale of January 2 is shown in illustration 17 on the next page.

ILLUSTRATION 17

R. F. MITCHELL, PRESIDENT
JOHN H. PACE, VICE PRES. & TREAS.
A. F. McALLISTER, SECRETARY

N.W. COR. CEDAR & JEFFERSON STS.

Our responsibility ceases when goods are delivered to Transportation Company receipted for in good order. All claims for deduction of any kind must be made immediately on receipt of goods giving date of invoice.

ESTABLISHED 1906

Pensacola Grocery Co.

IMPORTERS & WHOLESALE **Grocers**

PROVISIONS. GRAIN. HAY. FLOUR. GRITS. MEAL ETC.

SPECIAL AGENTS FOR CIGARS & TOBACCO

ELEGANT AND GOLD MEDAL FLOUR.

PENSACOLA, FLA., January 2. 19

SOLD TO Charles Wagner 23 Front St

TERMS: C/C 10 days.

		100 bu. Oats	.70	70		

Make the entries as they should appear in the sales book as shown in the following illustration, footing and extending the total sales for the month.

ILLUSTRATION 18

Sales Book. January 2. 19—

		Charles Wagner 23 Front St. a/c 10 days.				
		100 bu Oats	.70			70
		6				
		R.S. Moore Brent Fla a/c 10 days.				
		50 bu Wheat	1.10	55		
		60 " Corn	.90	54		109
		15				
		Platt & Co. Milton Fla a/c 30 days.				
		40 bu Oats	.75	30		
		25 " Corn	.90	22	50	
		30 " Wheat	1.10	33		85 50
		21				
		Charles Wagner a/c 10 days				
		125 bu Corn	.90	112	50	
		20 " Wheat	1.15	23		135 50
		27				
		C.D. Dickson 102 Orange Ave Terms cash				
		150 bu Oats	.70	105		
		60 " Corn	.95	47	50	152 50
		Total Sales				552 50

Answer the following questions:

(*a*) What are the due dates of the various sales? Prepare a list. (*b*) What were the total sales to each customer during the month? (*c*) If bills were paid when due, what amounts remain unpaid at the end of the month and who owe them?

Purpose and method: Be careful to point out that sales represent a different class of transactions than purchases, also that the items are included in the record for the reason stated. Point out to the student that he is now representing the *seller* instead of the *purchaser* as he was when recording purchases, and that those to whom goods are sold *owe* until the goods are paid for, whereas, in the previous lessons those from whom purchases were made were *owed* until the goods were paid for.

Some Review Questions

Beginning with page 1 find answers for the following questions.

1. What is commercial arithmetic, bookkeeping, merchandise, purchases, sales?

2. Explain an inventory, a trading statement, a gross trading profit and how it is found.

3. How is the net returns from sales found, the net cost of goods sold?

4. What is the difference between a trading statement and a trading and profit and loss statement?

5. Name some of the items affecting the net profit or loss?

6. Explain how purchases are listed.

7. What aliquot parts are in common use?

8. Name and explain some of the short methods in calculating.

9. Name some of the items that may increase or reduce the cost of purchases.

10. Name the items that will affect the net returns from sales.

11. If the cost of goods sold is greater than the net returns from their sale, what does the difference show?

12. What must be deducted from the gross profit before the net profit can be ascertained?

13. To whom does the net cost belong in a business conducted by a single proprietor?

14. What is the difference in the effect on the cost of purchases for the year between purchases returned and warehouse expense?

15. What is the principal purpose of a trading statement? Of a profit and loss statement?

16. What is included under the head of "Costs" in a trading and profit and loss statement? Under "Returns?" Under "Expenses?"

LESSON 26

Suggestion: Continue drills in calculating by aliquot parts. Before taking up the following exercise in listing sales, let teacher and class determine the best method of calculating and extending the amount of each item.

For example, an analysis of the numbers to be multiplied in the following examples would suggest the following computations: The first item, $10 \times 6 = 60$, may be done mentally, only the 60 being written. The second and third items may be calculated mentally, writing the results only. In the sale of February 12 the simplest method is to add a cipher to the amount and add to it one-half of itself; i.e., 67.50 + 33.75 gives the correct product. In like manner the first item in the sale of February 22 may be calculated by adding two ciphers to the price and dividing by 4, 25 being one-fourth of 100. Only the result should be written.

Exercises in Listing Sales

1. The Old Red Mill Co. of Lawrence, Mass., made the following sales during February.

Feb. 1, C. R. Butler, 219 Central Ave., % 10 ds. 10 brls. Snow Flake Flour @ $6.00; – – Feb. 5, Morton & Craig, Marlboro, Mass., % 30 ds., 12 brls. Red Seal Flour @ $6.75, – – 20 sacks Bran @ $1.65; – – Feb. 12, J. W. Brown, 12 Market St., % 15 brls. Red Seal Flour @ $6.75; – – Feb. 18, C. R. Butler, % 10 ds., 8 sacks Bran @ $1.70; – – 15 brls. Snow Flake Flour @ $6.00, – – 12 sacks Middlings @ $1.75; – – Feb. 22, Walton & Sons, Spencer, Mass., % 30 ds., 25 brls. Red Seal Flour @ $6.70, – – 12 brls. Snow Flake Flour @ $5.95; – – Feb. 27, Morton & Craig, % 30 ds., 30 sacks Middlings @ $1.25.

Make the sales book entries.

Answer the following questions:

(*a*) What were the due dates of the above bills? (*b*) What was the amount of cash received if all bills falling due before the end of the month were paid, and what was the balance owing by those whose bills were not due at the end of the month? (*c*) Show the amount owing by each one of the parties whose bills were not paid at the end of the month. (*d*) J. W. Brown pays his bills monthly on the last day of each month. What is the total amount still to be collected for unpaid bills March 1? (*e*) Determine the easiest method of finding the products of the following problems, calculating by aliquot parts. (Refer to ¶3, lesson 22.)

$128 \times 12\frac{1}{2}$; $318 \times 16\frac{2}{3}$; 654×25; $429 \times 33\frac{1}{3}$.

125×76 (Add two ciphers to 76 and add one-fourth of 7600, thus 7600 + 1900). Why?

378×150 (Add two ciphers to 378 and increase it by one-half of itself). Why?

$424 \times 112\frac{1}{2}$ (Add two ciphers and divide by 8, then multiply by 9). Why?

$168 \times 133\frac{1}{3}$ (Add two ciphers, divide by 3, and multiply by 4). Why?

Purpose and method: Short methods in calculating are emphasized in this lesson because nowhere else are they used to the same extent as in billing. Endeavor to have your pupils cultivate the "arithmetical sense," which means the sense that determines whether or not a given result is a reasonable result from the figures given.

LESSON 27

Suggestion: In the following exercise in listing sales the items starred (*) may be calculated by a short method. See ¶ 2 *d*, Lesson 22.

Listing Sales

1. Make the proper sales book entries for the following sales made during March by Allen & Bates, Milwaukee, Wis.:

Mar. 3, Johnson Provision Co., Wausau, Wis., % 10 ds., 6 cases Canned Corn 12 doz., @ $1.55 (per doz.); – – 10 cases Canned Peas, 20 doz., @ $1.75 (per doz.), (Canned goods are usually sold by the dozen and not by the case); – – Mar. 7, C. R. Waite, 2521 Van Buren St., % 15 ds., 5 cases Canned Tomatoes, 10 doz., @ $1.37½, – – 11 cases Canned Pineapple, 22 doz., @ $2.95; – – 9 cases Canned Beans, 14 doz., @ $1.45; – – Mar. 10, C. C. Carleton & Bro., La Crosse, Wis., % 30 ds., 20 cases Canned Tomatoes, 40 doz., @ $1.35½; – – 15 cases Canned Corn, 30 doz., @ $1.55; – – Mar. 13, F. G. Patterson, 517 Madison Ave., % 10 ds. 16 cases Canned Peaches, 32 doz., @ $2.65; – – 14 cases Canned Pineapples, 28 doz., @ $2.98*; – – 20 cases Canned Peas, 40 doz., @ $1.75; – – Mar. 17, C. R. Waite, cash, 12 cases Canned Peaches, 24 doz., @ $2.70; – – Mar. 22, Andrew Jenson, Tomah, Wis., % 30 ds., 6 cases Canned Beans, 12 doz., @ $1.45; – – 5 cases Canned Corn, 10 doz., @ $1.55; – – 15 cases Canned Tomatoes, 30 doz., @ $1.40; – – Mar. 25, C. C. Carleton & Bro., % 10 ds., 25 cases Canned Pineapple, 50 doz., @ $2.92*; – – Mar. 28, Johnson Provision Co., % 30 ds., 10 cases Canned Corn, 20 doz., @ $1.57; – – 5 cases Canned Peas, 10 doz., @ $1.75; – – 4 cases Canned Peaches, 8 doz., @ $2.67.

Answer the following questions: (*a*) What were the total sales and the total amount collected during the month for bills that had matured? (*b*) How much did each one owe whose bills fell due in April, and what was the total amount collected April 1?

Purpose and method: The appearance of the sales sheet for the lesson should show considerable improvement over that for lesson 26. *Teach penmanship* by requiring the best possible work of the student in these exercises. Accept nothing that is not the best work of which the student is capable. A distinction should be made between calculating by "short methods" as stated in the suggestion above, and calculating "mentally," that is, without writing the calculation on paper. For instance, the first item would be calculated *mentally* as well as the second, third, etc, The items starred, however, cannot be extended mentally but they may be calculated by short methods. This distinction should be clearly pointed out to the student and should be continued throughout the lessons as long as is necessary. Strictly speaking, "mentally" is an improper word to use in this connection because all calculations are *mental*, whether the operation is stated orally or in writing. This term, however, is commonly used to express those calculations in which the result is found without writing out the solution in full.

LESSON 28

Suggestion: In all items starred (*) calculations can be shortened by the use of the aliquot parts method. For instance, to multiply 18 by $2.30, mentally multiply $2.30 × 20 = $46.00 and deduct two times $2.30, or $4.60. In calculating this item write down the $46.00 and $4.60 and subtract. The difference is the product.

Exercise in Listing Sales

W. A. Wolfe & Co., Richmond, Va., Commission Merchants, sold goods during April as follows:

Apr. 2, Lester Wilson, Ashland, Va., cash, 20 brls. Baldwin Apples @ $3.50; – – Apr. 4, Banks & Noble, 1 Merchants Way, % 15 ds., 18 bu. Rappahannock Potatoes @ $2.30*; – – 14 brls. N. Y. Apples @ $3.90*; – – Apr. 7, George A. Scott, Petersburg, Va., % 20 ds., 20 brls. Sweet Potatoes @ $3.97*; – – Apr. 11, D. C. Clarkson & Co., 19 High St., % 10 ds., 14 sacks Yellow Onions @ $4.20*; – – 19 brls. Baldwin Apples @ $3.55*; – – Apr. 11, Banks & Noble, % 10 ds., 25 brls. Sweet Potatoes @ $4.05*; – – Apr. 16, D. C. Clarkson & Co., % 15 ds., 50 bu. Rappahannock Potatoes @ $2.25*; – – 22 brls. Sweet Potatoes @ $3.92*; – – Apr. 18, Lester Wilson, cash, 16 sacks Yellow Onions @ $4.15; – – Apr. 21, D. C. Clarkson & Co., % 30 ds., 12 brls. N. Y. Apples @ $3.95; – – 15 brls. Baldwin Apples @ $3.50*; – – Apr. 27, Banks & Noble, % 10 ds., 16 sacks Yellow Onions @ $4.25; – – 12 crates Florida Eggplants @ $3.10; – – Apr. 29, D. C. Clarkson & Co.; % 30 ds., 13 brls. Baldwin Apples @ $3.50*; – – 15 brls. N. Y. Apples @ $3.95*.

It must be remembered that the aliquot parts and other short methods are not applicable in all cases with a saving of time, and short methods have no other advantage.

To become highly proficient in the use of the aliquot parts and other short methods the student should be drilled so that he can determine at a glance upon the proper short method, or whether a short method can be used to advantage. This proficiency is only secured by continual analysis. Some short method in calculating should be developed at every recitation.

Make a list of the amounts sold to each purchaser during the month. Make another list showing the amounts paid by each purchaser during the month if all bills were paid at maturity. Make a third list of the amounts owed by each purchaser remaining unpaid at the end of the month, showing the items if there is more than one bill remaining unpaid for any one customer.

LESSON 29

Other Aliquot Parts

The aliquot parts of 100 referred to in paragraph 3, lesson 22 are only a few of many in common use. Following are others:

$6\frac{1}{4}$ is contained in 100 16 times; it is $\frac{1}{16}$ of 100.

Example: $48 \times 6\frac{1}{4} = 4800 \div 16$, or 300; $24 \times 8\frac{1}{3} = 2400 \div 12$, or 200.

An aliquot part is a number that is contained in another number an equal number of times without a remainder, hence one number is an aliquot part of any other number *that is a multiple if it.*

Thus, $6\frac{1}{4}$ is not only an aliquot part of 100 but it is also an aliquot part of $12\frac{1}{2}$, $18\frac{3}{4}$, 25, $31\frac{1}{4}$, $37\frac{1}{2}$. What are the other numbers less than 100 of which $6\frac{1}{4}$ is an aliquot part?

$8\frac{1}{3}$ is an aliquot part of $16\frac{2}{3}$, 25, $33\frac{1}{3}$, etc. What are the other numbers less than 100 of which $8\frac{1}{3}$ is an aliquot part?

Note: In like manner determine what are the other numbers less than 100 of which $12\frac{1}{2}$, $16\frac{2}{3}$, 25, and $33\frac{1}{3}$ are aliquot parts.

Work the following problems, using aliquot parts of either the multiplicand or the multiplier, and be ready to explain your reasons for selecting the aliquot parts you have used.

Multiply 420 x $16\frac{2}{3}$, $33\frac{1}{3}$.
Multiply 248 x $12\frac{1}{2}$, $6\frac{1}{4}$.

100 is three times $33\frac{1}{3}$; it is $\frac{1}{3}$ of 100.

What would be the price of 750 bushels of corn at $\$.66\frac{2}{3}$ per bushel? (Deduct one-third, and tell why.)

Multiply 375 x $12\frac{1}{2}$; 36 x 15 (add one cipher to 36 and add one-half of that amount); 18 x 15; 56 x 15; 126 x 15.

Multiply 1555 x 50, $33\frac{1}{3}$.
Multiply 220 x 98; 312 x 102; 71 x 101; 365 x 99.
Multiply 20 x $112\frac{1}{2}$; 40 x $107\frac{1}{2}$; 250 x \$4.05.

Purpose and method: The teacher is expected to drill very thoroughly on the aliquot part features suggested in this lesson. Simple problems should be prepared to bring out every point. These may be put on the blackboard for solution.

LESSON 30

Suggestion: Continue a series of daily drills in rapid calculations using the chart, also calculating by the use of short methods, aliquot parts, etc. These drills should be continued during the entire semester. Special drills will be mentioned from time to time.

Exercise in Listing Sales

Reeder & Co., of Seattle, Washington, had the following sales for May. Make the proper entries in the sales book.

Before preparing the sales book record go over each sale and determine the best method of calculating and extending the amount of each item.

May 1, E. S. Malone, Kent, Wash., % 15 ds., 3 tubs Creamery Butter, 150 lbs., @ 34¢; 5 boxes Cream Cheese, 125 lbs., @ 13¢*; – – May 2, New Washington Hotel, City, 5 crates Eggs, 150 doz., @ 29¢, (this hotel settles all bills monthly); – – May 5, Carson, Meade & Co., Tacoma, Wash., % 10 ds., 15 tubs Creamery Butter, 750 lbs. @ 37¢; – – May 8, Hotel Belvedere, City, % 10 ds., 2 boxes Cream Cheese, 50 lbs. @ 13½¢; 3 crates Eggs, 90 doz., @ 29¢; – – May 10, New Washington Hotel, 6 tubs Creamery Butter, 300 lbs. @ 37½¢; – – May 14, Carson, Meade & Co., % 15 ds., 10 crates Eggs, 300 doz., @ 27¢; – – May 17, Hotel Belvedere, % 15 ds., 2 tubs Creamery Butter, 100 lbs., @ 28½¢; 3 boxes Cream Cheese @ $2.15; – – May 21, Edw. Emory, Issaquah, Wash., for cash, 3 crates Eggs, 90 doz., @ 30¢; – – May 24, New Washington Hotel, 5 crates Eggs, 150 doz., @ 29½¢; 3 boxes Cream Cheese @ $2.10; – – May 24, E. S. Malone, % 15 ds., 4 crates Eggs, 120 doz., @ 30¢; 3 boxes Creamery Butter, 75 lbs., @ 35¢; – – May 29, Hotel Belvedere % 10 ds., 4 cases Butter Prints, 160 lbs., @ 42¢; – – May 30, New Washington Hotel, 5 tubs Creamery Butter, 250 lbs.,@ 37¢.

Answer the following questions: (*a*) What were the total sales? (*b*) What bills were due in May and what was their total? (*c*) What bills were not due until after May 31? (*d*) Name those who owe, and the amount they owe on bills maturing after May 31. (*e*) If the New Washington Hotel paid its bill in full June 1 what was the remainder owing on bills maturing after May 31? (*f*) If on May 29 the New Washington Hotel returned three crates of eggs sold on the 24th because of their unusable condition, how much would they owe May 1 when they made settlement? (*g*) In such a case what would have been the net returns from sales for the month?

LESSON 31

PRACTICAL SHORT METHODS

Determine and be ready to explain to your classmates how you would find the products of the following problems in extending items on bills.

1. 240×45 (¶ 2*a*, lesson 22).
   240×50; 57729×11 (¶ 2 *b*, lesson 22).
   145×55; 283×55; 206×33; 723×77; 211×95; (¶ 2 *d*, lesson 22).
   ¶163×205; 1565×21; 1538×25; 84×22; 371×29.

Some additional suggestions for short methods:

When multiplying by 29, multiply by 30 and deduct the number multiplied.

When multiplying by 28, deduct twice the number multiplied.

When multiplying by 31, multiply by 30 and add the number multiplied

When multiplying by 32, add twice the number multiplied, etc.

When multiplying by 35, multiply by 30 and add $\frac{1}{6}$ of the product.

When multiplying by 36, multiply by 30 and add $\frac{1}{6}$ of the product.

When multiplying by 39, multiply by 40 and deduct the number multiplied.

When multiplying by 38, deduct twice the number multiplied.

When multiplying by 41, add the number multiplied.

When multiplying by 42, add twice the number multiplied.

When multiplying by 43, add three times the number multiplied.

When multiplying by 44, add $\frac{1}{10}$ the number multiplied which is done by writing the number multiplied one point to the right.

When multiplying by 45, multiply by 40 and add $\frac{1}{8}$ of the product.

Multiply the following numbers by the numbers above beginning with 29 and ending with 45:

215, – – 37, – – 721, – – 67, – – 56, – – 823, – – 719, – – 78, – – 87, – – 721.

In like manner the class should determine under the direction of the teacher, the short methods whenever possible for all numbers under 100. The teacher should supply examples illustrating the application of these shorter methods.

NOTE: It should be observed that many of these short methods are briefer only because they require fewer figures to be written down in making the calculations. In other words, a large part of the work may be done mentally which otherwise would be impossible.

Purpose and method: This lesson presents an extension of lesson 26. It is rich in results. Never omit anything called for in any lesson. Include it in the next day's work if the time is too short. Refer back to these short methods frequently in subsequent lessons.

LESSON 32

Suggestion: In the following problems group figures in adding whenever possible. Similar drills with a time limit placed for securing the correct results will greatly increase rapidity.

Cash includes gold, silver, and other coins, bank notes, United States treasury notes, money orders, bank drafts, checks, and whatever else is given and received as money.

Cash Receipts and Payments

1. The following amounts of cash were received during the day: \$12.75, – – \$3.27, – – \$21.62, – – \$38.45, – – \$9.23, – – \$11.71, – – \$6.05, – – \$24.56, – – \$113.39, – – \$17.44, – – \$8.16, – – \$9.75, – – \$9.60, – – \$6.79, – – \$316.22.

What were the total cash receipts for the day?

2. The cash receipts for another day were as follows: \$38.75, – – \$112.29, – – \$316.48, – – \$12.29, – – \$18.37, – – \$98.73, – – \$8.55, – – \$32.39, – – \$47.86, – – \$416.12, – – \$3.28, – – \$65.14, – – \$148.96, – – \$12.25, – – \$763.87.

What was the total amount received?

3. The third day's receipts were as follows: \$121.92, – – \$78.53, – – \$94.28, – – \$83.71, – – \$5.48, – – \$2.09, – – \$16.19, – – \$19.75, – – \$54.27, – – \$83.39, – – \$72.87, – – \$7, – – \$7.86, – – \$841.75, – – \$2.10.

What was the total amount received? If during the same day cash was paid out amounting to \$345.65, what was the remainder of cash on hand at the close of the day?

4. On the first day of the month the following amounts of cash were paid out: \$6.35, – – \$7.19, – – \$18.24, – – \$20, – – \$2.25, – – \$14.71, – – \$3.95, – – \$17.76, – – \$8.22, – – \$5.31, – – \$6.50.

What was the balance of cash on hand if the total receipts for the day were \$146.75.

5. If in the morning the balance of cash on hand from the previous day was \$62.17, the receipts for the day were \$203.19, and the payments were \$146.75, what was the balance of cash on hand at the close of the day?

6. If the balance of cash from the previous day was \$38.45, the receipts were \$75.45, and the payments \$83.92, what was the balance of cash on hand at the close of the day?

Purpose and method: This lesson defines cash and develops what cash receipts and cash payments are, and what the difference between them represents; also that when the receipts are greater than the payments it increases the balance—all of which is a good day's work if thoroughly accomplished. The teacher may provide additional exercises if there is time and it is necessary.

LESSON 33

Cash is a *medium of exchange.* It is also used as a *standard measure of value;* i.e., the value of other commodities expressed in dollars and cents. The standard measure of value in this country is the dollar.

The value of anything is determined by its purchasing power. This purchasing power (value) is *relative,* depending upon the law of supply and demand, and that law in turn depends upon the extent to which a particular article or thing *is desired.* The value of a fur coat in Alaska is great, while the value of the same coat in Florida is small for the reason that one living in Alaska desires such a coat for his comfort, while there is no such desire in a warm country where such a coat would be useless.

Again, when there is a great demand for a given article, or a limited supply, or both, the price of that article rises. When there is an over supply, or a limited demand, or both, the price of the article falls. A notable instance illustrating this law of supply and demand was the high price of wheat and many other commodities during the European War. This increase or decrease of cost affects all commodities whether in the form of raw materials or finished products ready for purchase by the consumer.

Cash Receipts and Payments

If the cash receipts and payments for the first twenty days in May were as follows what was the balance of cash on hand at the close of each day's business.

May 1, receipts $136.12, – – payments $37.26, – – May 2, receipts $27.25, – – payments $44.12, – – May 3, receipts $212.21; – – payments $216.25, – – May 4, receipts $77.75, – – payments $17.65, – – May 5, receipts $145.87, – – payments $75, – – May 7, receipts $162.12, – – payments $181.50, – – May 8, receipts $364.71, – – payments $76.90, – – May 9, receipts $118.25, – – payments $284.50, – – May 10, receipts $226.76, – – payments $185.51, – – May 11, receipts $403.12, – – payments $513.56, – – May 12, receipts $1227.35, – – payments $184.17, – – May 14, receipts $431.56, – – payments $1125.10, – – May 15, receipts $1685, – – payments $5637, – – May 16, receipts $409.91, – – payments $236.35, – – May 17, receipts $44.48, – – payments $83.79, – – May 18, receipts $219.03, – – payments $314.36, – – May 19, receipts $222.11, – – payments $213.56.

Listing Cash Receipts

Receipts and payments of cash are listed in a *cash book,* the receipts and payments being listed on separate pages or in different books. Listings of cash received usually include the date, the name of the party from whom the cash was received, with a brief statement of the purpose for which it was received, and the amount.

LESSON 34

1. The following are the cash receipts of Baker & Co. for the month of July. List them as shown in the illustration.

July 2, G. E. Emery, bill June 22, $915.16; – – July 3, Howard Gibson, bill June 30, $33.64; – – July 6, Emerson & Co., bill July 2, $115.48; – – July 7, The Elliott Co., bill of this date, $56.50; – – July 10, R. A. Fisher & Co., bill of July 2, $236.75; – – July 12, G. E. Emery, bill June 11, $48.25; – – July 17, B. B. Parker, on % $100; – – July 20, Emerson & Co., bill May 21, $83.68; – – July 25, Carter & Harris, bill June 26, $362.17; – – July 28, Emerson & Co., bill July 23, $54.95; – – July 31, Howard Gibson, balance of % $28.63.

ILLUSTRATION 19

Cash Receipts

July '12	2	G.E.Emery	Bill June 22,	915	16		
	3	Howard Gibson	" " 30,	33	64		
	6	Emerson & Co.	" July 2,	115	48		
	7	The Elliott Co.	" of this date,	56	50		
	10	R.A.Fisher & Co.	" July 2,	236	75		
	12	G.E.Emery	" June 11	48	25		
	17	B.B.Parker	On a/c	100			
	20	Emerson & Co.	Bill May 21,	83	68		
	25	Carter & Harris	" June 26,	362	17		
	28	Emerson & Co.	" July 23,	54	95		
	31	Howard Gibson	Balance of account	28	63	2035	21

Answer the following questions: (*a*) What were the total receipts of cash for the month? (*b*) What were the amounts of cash received from G. E. Emery, Howard Gibson, and Emerson & Co.? (*c*) If Emery owed $1248.61 July 1, what was the amount of his unpaid bills? (*d*) What did Howard Gibson owe July 1? (*e*) How much of the cash received from Emerson & Co. applied to July bills? (*f*) If the cash received from Emerson & Co. July 20 was received on the day the balance was due, what were the terms of the bill? (*g*) If there was a balance of cash on hand July 1 amounting to $341.17, and the total payments during the month were $283.95, what would be the balance of cash on hand at the close of business July 31? (*h*) If all but $13.23 of this amount had been deposited in bank, what was the amount deposited?

LESSON 35

Listing Cash Receipts

1. List the following items of cash received by Baker & Co. for the month of August after entering the balance of cash on hand for the previous month as shown in the illustration.

August 1, Balance of cash July 31, $416.45. The Elliott Co., bill of this date, $43.84; -- Aug. 4, B. B. Parker, bills of July 20 and 27, $51.16; -- Aug. 6, E. M. Magill, % $50; -- Aug. 6, Bennet Bros., bills of this date and Aug. 1, $73.35; -- Aug. 11, R. E. Fisher & Co., cash sale, $12.50; -- Aug. 13, Emerson & Co., bills Aug. 5 and 6, $348.72; -- Aug. 15, A. N. Root & Son, bill Aug. 8, $35; -- Aug. 21, E. M. Magill, on % $25; -- Aug. 22, G. E. Emery, bill of June 25, $145.52; -- Aug. 25, G. E. Emery, bill June 26 $16.45; -- Aug. 28, Emerson & Co., in full settlement, $8.25; -- Aug. 30, Howard Gibson, bills Aug. 3, 6, and 10, $58.34.

Illustration 20

Cash Receipts

Aug 19	1	Balance cash on hand July 31		416	45
	1	The Elliott Co.	Bill of this date	43	84
	4	B B Parker	Bills July 20-27	51	16

Answer the following questions: (*a*) What was the total cash received during the month including the balance on hand August 1? (*b*) What was the amount of cash received during the month omitting the balance on hand August 1? (*c*) What is still owed by G. E. Emery after paying the balance from the previous month? (*d*) If the total payments for the month amounted to $456 over and above the balance on hand August 1, what was the balance on hand August 31?

Purpose and method: Having familiarized the student with the classes of transactions included under the heads of purchases and sales, we now take up a third class known as cash transactions, giving attention in this lesson to recording cash receipts. In this lesson and the one following the various uses of cash are defined and explained. Value, purchasing power, and that which determines the value of a particular article, are explained. The form of a simple cash book is illustrated. The difference between cash receipts and payments is developed as well as what a cash balance is. If the teacher will offer additional suggestions and supplement the questions asked by others that may suggest themselves, this should prove a very interesting lesson, particularly if a neat and accurate listing of the cash receipts is required.

LESSON 36

Listing Cash Receipts

In the preceding lesson all cash was received in payment of bills or for amounts that were owed by the individuals, firms and corporations named. In a bookkeeping sense each of these are considered *as persons.*

But cash may be received for other purposes than those named. It may be received in payment of notes against others, which are known as *notes receivable,* for *interest* on such notes, or for *interest* on debts not paid when due, for *cash sales* of merchandise, etc.

The following illustrations show the form of listing cash received for the purposes named.

ILLUSTRATION 21

7	Notes Receivable	A B Curtis note due Aug 7	300		
7	Interest	90 days on above note	4	50	
15	Interest	On D C Blair & Co's note at 3 mos for $1200. due Nov 15.	18		
21	Notes Receivable	Part payment of Bell & Bates note due Aug 21, renewed for $500. for 60 days	950		
31	Interest	On Jas Marshall's a/c to date	3	70	
31	Sales (Cash)	4 bbls Flour @ $8-	32		

Each listing of cash received or paid, or of purchases, or of sales, or of any other item relating to business transactions, is called *an entry.*

Each entry should clearly state in the simplest language *just what the transaction was* so that what occurred would be clearly understood if referred to thereafter.

In a regular cash book the first space to the right is known as the *name* column or the *account* column, the second space is known as the *explanation* column, and the third as the *amount* column. The righthand money column is used for extending total amounts for the month, etc. In the *name* column is written the name of the account in the ledger affected by the entry. The *explanation* column, as has already been stated, is intended to describe the transaction sufficiently so that at any later date it may be fully understood when reference is made to it. Great care should be exercised in recording these explanations in the fewest possible words consistent with clearness and accuracy.

Listing Cash Receipts

The cash receipts of Edson and Brown for the month of September were as follows:

Sept. 1, Balance on hand Aug. 31, $1942.60; – – Sept. 1, A. C. Mellon, bill Aug. 16, $46.95; – – Sept. 3, Notes Receivable, D. M. Clark's note due Sept. 7, $125.40; – – Sept. 4, J. D. Boggs, bill Sept. 1, $95.49; – – Sept. 7, Notes Receivable, Chas. Gay's note due Sept. 7, $250; – – Sept. 7, Interest, for 30 ds. on above note, $1.25; – – Sept. 8, M. R. Scott, bill Aug. 5, $321.70; – – Sept. 10, Sales, cash, 6 brls. Flour @ $8.25, $49.50; – – Sept. 11, A. C. Mellon, bill Aug. 15, $123.28; – – Sept. 12, Johnson & Brown, bill Aug. 13, $87.65; – – Sept. 14, Sales, cash, 1 ton Hay $22.50; – – Sept. 17, Howe & Sons, bill July 11, $428.76; – – Sept. 17, Notes Receivable, C. Boyd's note due this date, $246.90; – – Sept. 17, Interest for 92 days on above date, $3.79; – – Sept. 18, Johnson & Brown, bill Aug. 20, $133.61; – – Sept. 20, Sales, cash 2 brls. Flour @ $8.50, $17; – – Sept. 21, M. R. Scott, bill Aug. 6, $25.18; – – Sept. 22, Interest on Small Bros. account to date, $5.20; – – Sept. 24, Sales, cash for the day, $120.30; – – Sept. 26, C. F. Clarkson, bill June 30, $309.55; – – Sept. 26, Notes Receivable, Chas. Gay's note due today, $150; – – Sept. 27, Howe & Sons, bill Aug. 25, $73.25; – – Sept. 28, J. D. Boggs, bill Sept. 10, $119.61; – – Sept, 28, Sales, cash for the day, $12.42; – – Sept. 29, M. R. Scott, bill Sept. 1, $158.20; – – Sept, 30, Notes Receivable, D. E. Ray's note due Oct. 1, $375.60; – – Sept. 30, Interest, 30 days on above note, $1.88; – – Sept. 30, A. C. Mellon, bill Sept. 10, $39.50.

Proceed as follows: (*a*) Make the entries for the cash receipts for the month. (*b*) What amount of cash has been received in payment of bills maturing during the month? (*c*) What was the amount of cash received in payment of notes receivable during the month? (*d*) What amount of cash was received in payment of interest on notes receivable? (*e*) What was the amount of cash received for cash sales of merchandise? (*f*) What were the total cash receipts for the month not including the balance on hand August 31? (*g*) If the cash payments for the month were $4317.96, what was the balance of cash on hand September 30? (*h*) If $883.45 of this amount was on deposit in bank, what was the amount of cash in the cash drawer?

Purpose and method: This lesson is intended (a) to further fix the form of the cash book in the student's mind, (b) to introduce items of cash received in addition to those in payment of bills owed, (c) to lay the foundation for the classification of items that will later be shown in the form of accounts, and (d) to find the amount of such items that belong to each classification. The teacher's instruction, however, is not to go further than is called for in the lesson. A supplemental problem might be dictated by the teacher for such students as require it, but a single problem thoroughly analyzed and understood is better than several that are not.

LESSON 37

Suggestion: Continue rapid calculations and short method drills.

Cash Payments

The method of listing cash payments is very similar to that of listing cash receipts, as is shown in the following examples.

1. The following are the cash payments of John Watson for the month of July. List them as shown in the following illustration of the first three items.

July 2, Henry Miller, bill June 5, $125.90; – – July 3, J. F. Brandt, bill June 16, $83.17; – – July 5, A. M. Kester, bill May 31, $243.28; – – July 9, Henry Miller, on %, $175; – – July 12, R. J. Platt & Co., bill July 2, $349.25; – – July 16, A. M. Kester, bill June 18, $56.28; – – July 19, Stone & Stone on % $100; – – July 21, J. F. Brandt, bill July 6, $266.76; – – July 24, Blake Bros. Co., bill July 9, $526.47; – – July 27, Henry Miller, on %, $65; – – July 30, Stone & Stone, in full of %, $119.75.

ILLUSTRATION 22

Cash Payments

19							
July	2	Henry Miller	Bill June 5	125	90		
	3	J. F. Brandt	" " 16	83	17		
	5	A. M. Kester	" May 31	243	28		

Answer the following questions: (*a*) What were the total payments for the month? (*b*) What were the total payments to Henry Miller, to J. F. Brandt, and to Stone & Stone? (*c*) If the total receipts July 31 including the balance carried over from June amounted to $2765.75, what was the balance of cash on hand at the close of business on that date.

Purpose and method: This lesson contrasts cash payments with cash receipts. This contrast should be emphasized not only with regard to the difference between receiving and paying cash, but also with regard to the difference between receiving cash from those who *owe us* and paying cash to those *we owe*. Be careful not to use the terms "debtor" and "creditor" however.

LESSON 38

CASH PAYMENTS

1. Enter the following cash payments made by Hale & Hale for the month of August:

Aug. 1, A. J. McCollum, bill July 6, $96.72; – – Aug. 4, The Barnes Co., bills July 3 and 8, $247.16; – – Aug 6, Henry Cooper & Co., on %, $150; – – Aug 9, Chas. F. Duncan, bill June 11, $295.85; – – Aug. 10, A. J. McCollum, bills Aug. 3 and 5, $117.27; – – Aug. 15, Henry Cooper & Co., on %, $125; – – Aug. 17, W. W. Oliver, bills July 29 and Aug. 7, $328.75; – – Aug. 18, The Barnes Co., bill Aug. 12, $99.70; – – Aug. 20, A. J. McCollum, on %, $225; – – Aug. 22, Henry Cooper & Co., in full of %, $72.46; – – Aug. 25, L. O. Cummins, bill of Aug. 3, $137.50; – – Aug. 27, H. V. Gaines, bills Aug. 4, 7 and 16, $186.19; – – Aug. 30, The Barnes Co., bill Aug. 10, $76.28; – – Aug. 31, Chas. F. Duncan, on % $175.

Answer the following questions: (*a*) If on August 1 there was a balance of cash on hand in bank amounting to $743.65, and at the close of business August 31 there was a balance of $1371.25, what was the amount of cash receipts for the month? (*b*) To whom was the largest amount of money paid during the month? If there still remained an unpaid bill for $112.16 and our purchases during the month amounted to $83.75, what was the amount we owed on this account at the beginning of the month? (*c*) What is the difference in the meaning of the explanation "on %" and "in full of %"?

Continue on the same cash payments sheet the payments for September as follows:

2. Sept. 1, A. M. Gordon, bill Aug. 1, $445.46; – – Sept. 3, B. L. Huntley, bill Aug. 2, $74.27; – – Sept. 5, The Barnes Co., bills Aug. 4 and 6, $583.19; – – Sept. 6, A. H. Dawson, bill Aug. 3, $21.27; – – Sept. 7, L. O. Cummins, bill Sept. 3, $19.34; – – Sept. 10, G. W. Richards & Co., on % $849; – – Sept. 12, A. M. Gordon, bills Sept. 1 and 5, $278.53; – – Sept. 14, B. L. Huntley, bill Aug. 15, $321.75; – – Sept. 15, The Barnes Co., bill Aug. 10, $429.43; – – Sept. 18, G. W. Richards & Co., in full of % $835.37; – – Sept 19, L. O. Cummins, bill Sept. 7, $342.41; – – Sept. 22, Henry Cooper & Co., bill Sept. 8, $478.87; – – Sept. 24, Chas. F. Duncan, bill Aug. 20, $681.43; – – Sept. 26, A. H. Dawson, bill Aug. 25, $189.11; – – Sept. 27, A. M. Gordon, bill Sept. 3, $214.87; – – Sept. 28, A. J. McCullum, bills Sept. 14 and 16, $128.37; – – Sept. 29, L. O. Cummins, in full of % $87.16.

Answer the following question: (*a*) If the balance of cash on hand September 30 was $1123.75, what were the receipts of cash in September?

Purpose and method: This lesson is but a continuation of lesson 37. It is expected that drills in calculating by aliquot parts should be conducted in connection with this lesson. Frequent reference should be made to lessons 29 and 31, and the methods of calculating therein suggested should be required in problems suggested by the teacher.

LESSON 39

Cash Payments

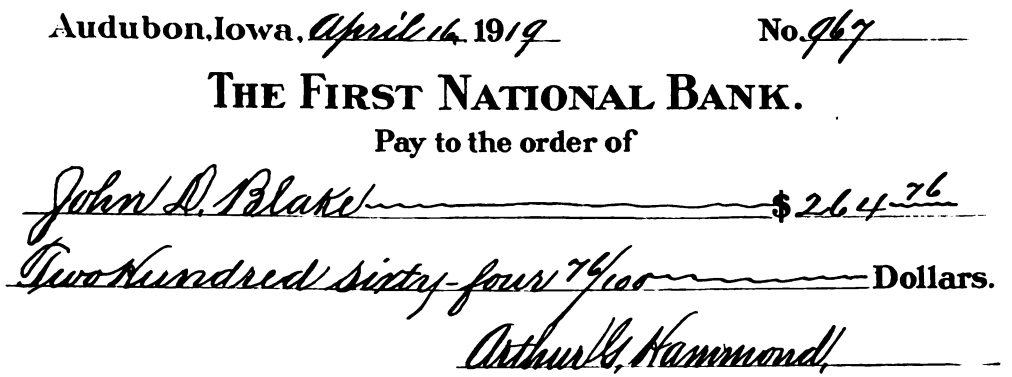
While cash payments may be made in any of the forms of cash stated in lesson 32, the safest and most convenient and generally used method is to make payments by check.

A check is a written order directing a bank or banker to pay money as stated therein. It is assumed that the party writing the check has funds on deposit against which he issues the check.

The form of a check is very simple. While this form is usually printed to save time, a simple, written order is sufficient. For instance, if Henry Ellis of Columbus, Ohio, had money on deposit in the First National Bank on September 12, and on that date wished to pay a bill for $150 he owed to Owens & Co., and should write on a slip of paper the following: "Columbus, Ohio, September 12, 19—, First National Bank pay to the order of Owens & Co. $150" and sign his name, this would be a good check.

For the convenience of their depositors banks usually furnish printed forms of checks. The following illustration shows such a check filled out by the depositor (who is known as the *drawer*) as it would appear when it was handed to the person to whom it was issued and to whom the money was to be paid (who is known as the *payee*). The payee would present the check at bank and get the money, or if drawn on another bank he could deposit it in his own bank as so much cash, in which case his bank would present it to the bank on which it was drawn and receive the money. (The bank on which the check is drawn is known as the *drawee.*) In this illustration Arthur G. Hammond is the drawer, John D. Blake is the payee, and the bank is the drawee.

Illustration 23


Audubon, Iowa, April 16 1919 No. 967
THE FIRST NATIONAL BANK.
Pay to the order of
John D. Blake $264.76
Two Hundred sixty-four 76/100 Dollars.
Arthur G. Hammond

The same check written on a blank sheet of paper appears below. One is just as valid as the other.

ILLUSTRATION 24

$264.76 Audubon Iowa, April 16, 1919

The First National Bank pay to the order of

John D. Blake Two Hundred sixty-four 76/100 Dollars.

Arthur G. Hammond

EXERCISES IN WRITING CHECKS

Write the following checks on blank paper.

1. Write a check dated Pittsburgh, Pa., October 26, 19—, directing the Fort Pitt National Bank to pay to the order of Hammond & Craig $263.75.

2. Write a check dated Chicago, Ill., March 9, 19—, directing the Colonial Trust Company to pay to the order of Holland Manufacturing Co. $1275.17.

3. Pay Simpson Bros. $261.50 by check on the Third National Bank, dated Albany, N. Y., February 24.

4. The check for the first entry shown in the Cash Payments Sheet, illustration 22, lesson 37, was drawn by Mr. Miller on the City National Bank. Write the check.

MAKING DEPOSITS

Primarily money is deposited for its safer keeping, but as previously stated it is also safer and more convenient to make payments by check.

EXERCISES

1. The following deposits were made during the month of April: Apr. 3, $56.75; – – Apr. 6, $21.20; – – Apr. 7, $16.95; – – Apr. 12, $36.16; – – Apr. 18, $174.41; – – Apr. 23, $93.86; – – Apr. 27, $30.30; – – Apr. 30, $104.69. What were the total deposits for the month?

2. Checks against these deposits were issued during the month as follows: Apr. 6, $7.95; – – Apr. 12, $17.21; Apr. 12, $9.65; Apr. 17, $45.37; Apr. 27, $44.11; Apr. 30, $54.55. (*a*) What was the total amount of checks issued? (*b*) Of the amount deposited during the month, how much yet remains in bank? (*c*) If to this balance on hand May 1 there were added deposits during May amounting to $1378.75, and checks were issued amounting to $1416, what would be the balance on deposit on the evening of May 31?

Purpose and method: This lesson familiarizes the student with the form of a check and also of what it means to make deposits and issue checks. Fine exercises in rapid addition can be provided by calling off the amounts of different deposits that have been made and different checks that have been issued. The balance should be found. If the amount of payments dictated should be larger than the amount deposited, it would demonstrate in a practical manner the impossibility of checking out more money than has been deposited.

LESSON 40

In lesson 36 it was shown that cash could be received for other purposes than the payment of what was owing by persons for bills of goods sold to them. In like manner, cash payments can be made for other purposes than the payment of what is owing to persons for bills of goods purchased from them. In the following list of payments it will be noticed that there are included items for expenses, cash purchases, notes payable, (notes made payable to others) interest, etc. The entries differ in no way, however, except in the words used.

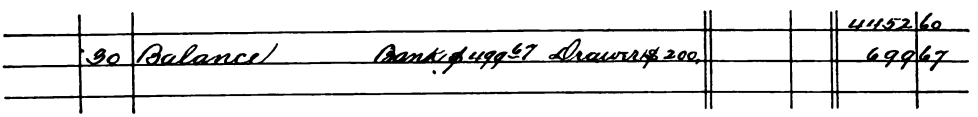
Listing Cash Payments

1. The cash payments made by the Blair Trading Company for September were as follows. Enter them on a Cash Payments Sheet.

Sept. 1, E. H. Blaine, bill Aug. 2, $112.42; – – Sept. 1, Expense, rent for September, $140; – – Sept, 3, Dixon & Co., bill July 25, $214.70; – – Sept. 5, Purchases, 10 tons Hay @ $17.25, cash, $172.50; – – Sept. 5, R. M. Brockman & Co., bills July 12 and 23, $363.47; – – Sept. 8, Notes Payable, to Fish & Co., $138.25; – – Sept. 10, E. H. Blaine, bill Aug. 6, $37.48; – – Sept. 10, Expense, Ray Coal Co's. bill this date, $42.50; – – Sept. 11, John R. Fish & Co., on a/c, $100; – – Sept. 13, Notes Payable, Fish & Co. to date, $276.23; – – Sept. 13, Interest, 61 days on above note, $281; – – Sept 14., Dixon & Co., a/c bill Aug. 10, $160.55; – – Sept. 15, Purchases, 5 tons Straw @ $15.25, cash, $76.25; – – Sept. 17, John R. Fish Co., on a/c $125; – – Sept. 17, Lee, Duer & Koch, bills, Aug. 25 and Sept. 4, $208.04; – – Sept. 18, Notes Payable, to A. B. Bane, due today, $198.80; – – Sept. 19, Central Commission Co., bill Aug. 22, $55.82; – – Sept. 20, Interest, on Loan from First Nat'l Bank, $10; – – Sept. 20, Purchase, 6 tons Hay @ $15.35, cash, $92.10; – – Sept. 21, John R. Fish Co., in full of a/c, $147.25; – – Sept. 21, Expense, postage and telegrams, $15.60; – – Sept. 22, E. H. Blaine, a/c bill Sept. 6, $127.50; – – Sept. 24, Notes Payable, Gregg & Fish due Sept. 26, $504.91; – – Sept. 24, Interest, 90 days above note, $7.57; – – Sept. 26, Dixon & Co., in full bill Aug. 10, $160.55; – – Sept. 27, R. M. Brockman & Co. bills Aug. 3, 25, and Sept. 8, $139.22; – – Sept. 28, Notes Payable, Curtis & Co., due today, $206.45; – – Sept., 28, Lee, Duer & Koch, bill Sept. 12, $81.19; – – Sept. 29, Interest, on J. K. Gill's a/c to date, $3.78; – – Sept. 30, Dixon & Co., on a/c $75; – – Sept. 30, Expense, salaries and wages, $245.50; – – Sept. 30, Expense, sundry expenses, $11.16.

Proceed as follows: (*a*) Make the entries for the cash payments for the month. (*b*) What amount of cash was issued in payment of bills maturing during the month? (*c*) What amount of cash was issued in payment of notes payable and of interest on the same? (*d*) What were the total cash payments for purchases during the month? (*e*) If the cash on deposit in bank September 1 was $765.85, and the deposits during the month amounted to $4186.72, what was the balance on deposit at the close of business September 30? (*f*) If the difference between the total cash receipts and cash payments showed that there should be a total of $899.97 on deposit in bank and in the cash drawer, how much was in the cash drawer? (*g*) How much was paid out during the month for expenses? (*h*) Were each of the interest items paid for the same purpose? (*i*) If the total footing of the cash receipts entries for September was $5152.57, cash payments $4452.60, and the balance $699.97, of which $499.97 was in bank and $200 in the cash drawer, it is customary to make an entry on the cash payments sheet as shown in the following illustration.

ILLUSTRATION 25



Purpose and method: This lesson completes the listing of cash receipts and payments. As previously stated, an analysis of the items as suggested in the questions is of the first importance. If the work on the sheet presented by the student is not the best of which he is capable, he should be required to rewrite it any number of times necessary to secure his best work. An excellent opportunity is offered to ascertain how quickly the students can find the correct footing on this sheet. The teacher is expected to continue to exercise ingenuity and judgment in contriving such additional exercises as will secure the highest degree of proficiency in the various tasks which have been assigned in each lesson if there is time for it.

LESSON 41

NOTES

In previous lessons, notably those relating to purchases and sales, it is shown that one may *owe* for what he purchases and does not pay for when the purchase is made, or he may *be owed* for what he sells for which he does not receive immediate payment.

A promise to pay is expressed or implied in every such instance. This promise is made by the *one who owes* to the one *who is owed.* It may be *expressed* in words as, "I will pay you what I owe you," and the time of such payment may also be stated. The promise may be *implied,* which is just as binding as if expressed in words. An instance of an implied promise is where one who pays his bills monthly at his grocer's, calls and asks for a pound of butter and a dozen of eggs and walks out without offering to pay or saying he will pay for them.

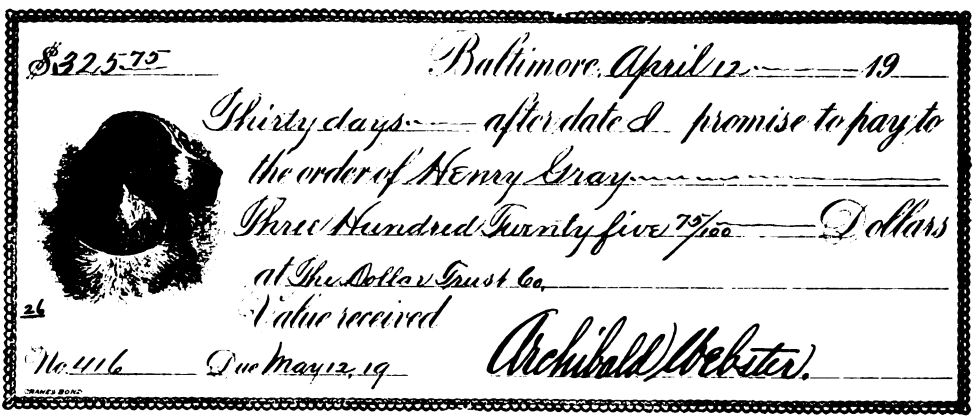
Expressed promises to pay may be either *oral* or *written:* i.e., by word of mouth as, "I will pay you," or in writing as, "I will pay," or, "I promise to pay," etc. *Written promises to pay* are usually in the form of *promissory notes,* although there are other forms of such promises which will be explained later.

A promissory note is an unconditional promise to pay a specified sum of money at a definite future time.

The principal parties to a note are the one who signs it, who is known as the *maker,* and the one in whose favor the note is made, who is known as the *payee.*

ILLUSTRATION 26

PROMISSORY NOTE


$325.75
Baltimore April 12 19
Thirty days after date I promise to pay to
the order of Henry Gray
Three Hundred Twenty five 75/100 Dollars
at The Dollar Trust Co.
Value received
No 416 Due May 12, 19
Archibald Webster.
26

In the above note Archibald Webster is the maker and Henry Gray is the payee. The maker and the payee are known as the *original parties* to a note. Notice that the note is made payable at a certain bank, which is presumably the bank of the maker.

The illustration below shows the same note written on a blank sheet of paper with a designated place of payment omitted, which is in every respect as valid and binding as if written in a printed form.

ILLUSTRATION 27

$325.75 Baltimore April 12, 19

Thirty days after date I promise to pay to the order of Henry Gray Three Hundred Twenty-five 75/100 Dollars at The Dollar Trust Co. Value received

Archibald Webster

27

Exercises in Writing Notes

1. On blank paper write the note shown in illustration 27.

2. Jacob Martin owes Herbert Henderson $250 for which Henderson has agreed to accept his note at 60 days. Write Martin's note, dated Denver, Colo., June 16, 19—. The note should read as follows:

$250.00 *Denver, Colo., June 16, 19—.*

Sixty days after date I promise to pay to the order of Herbert Henderson Two Hundred and Fifty $^{no}/_{100}$ ——————————————— *Dollars.*

For value received.

(*Signed*) *Jacob Martin.*

3. Write a note in favor of C. B. Benson, dated New Orleans, La., Mar. 23, 19—, at 30 days after date for $847.16, signed by John Peters.

4. Write Howard Brothers note, dated Detroit, Mich., Aug. 30, 19—, at 2 months after date in favor of The Garden Slate Co. for $128.35.

5. Write a note dated Seattle, Wash., Dec. 31, 19—, at 90 days after date of which Dwan & Hagar are the makers and The Granger Stove Co. is the payee.

Answer the following questions: (a) Name the maker and payee in each of the above notes. (b) Find the date on which each note falls due.

Note: When the time is stated in days the due date is the stated number of days after the date on which the note is made. When the time is stated in months the same day of the maturing month is the due date. For instance, a note dated January 10 at sixty days would fall due March 11; at two months it would fall due March 10. The same note dated December 31 at sixty days would fall due March 1; at two months it would fall due February 28.

(c) In each of the above notes who owes, and who is owed?

Purpose and Method: This lesson acquaints the student with the form of a promissory note and brings out the fact that a promise is expressed or implied in every transaction where something is purchased and not paid for at once, and that the note is a *written form* of such a promise.

LESSON 42

Notes

The principal advantage of promissory notes is that they are *negotiable;* i.e., they are transferable from one party to another, which permits them to be used in facilitating the transaction of business. Oral promises to pay cannot be so used with convenience.

Where an oral promise to pay exists and later a promissory note is given *it changes the oral promise into a written promise.*

Note: One of the advantages of promissory notes is that because of their negotiability they may be discounted at bank, which permits the owner of the note to have immediate use of the money called for therein less the charge the bank makes for discounting the note.

Exercise in Writing Notes

1. Write a note in your own favor, dated in your own city or town April 10, 19—, at 10 days after date, for $1765.75, payable at the Fidelity National Bank, signed by Elmer Hamilton. For the form of this note refer to illustration 26.

2. Write a note dated Kansas City, Mo., at 30 days after date, made payable to the order of The Weston Mfg. Co., for $825.35, payable at the Citizens National Bank of Kansas City, for value received, and sign your own name as maker.

Note: In this note the maker would be required to pay the note at the bank named on the day it was due. If the note had been made payable at the office of the maker, or at another place named in the note, the owner of the note at maturity would be expected to present it for payment at that place.

3. Rice Brothers & Co. of Rochester, N. Y., owe Fetterman & Howe $500 for which they have agreed to give their note dated November 22 at 60 days, payable at the Rochester Trust Co. Write the note.

4. Henry W. Baker bought a horse from J. B. Miller for $275 for which he gave his note at 3 months. They were both residents of Philadelphia and the date of the purchase was May 9. The note was made payable at the maker's office. Write the note.

5. Williams & Son of Cleveland, Ohio, owed Hughes & Co. $465.12, for which they gave three notes dated Jan. 31, one at 1 month for $150, another at 2 months for $150, and a third at 3 months for the remainder, all payable at the Euclid Bank with interest at 6%. Write the notes.

Note: Write "with interest at 6%" following the words "Euclid Bank."

Answer the following questions: (*a*) What are the due dates of each of the above notes? (*b*) At 6% the interest on $1 for 1 month is ½¢. At this rate what is the interest on each of the notes in example 5.

Purpose and Method: The examples in this lesson are stated somewhat differently than the examples in the preceding lesson. Additional notes may be dictated by the teacher if desired. If the students can calculate interest, require them to find the interest that would have accrued on the other notes if they had been drawn "with interest." This introduces the subject of interest, which will be developed later in the course.

LESSON 43

Notes Receivable and Notes Payable

Notes receivable are the promissory notes of others made or endorsed *in our favor;* i.e., notes on which we will receive payment when due.

Notes payable are our own promissory notes made *in favor of others;* i.e., notes which we are to pay when due.

Notes receivable and notes payable are listed separately, the former in a *notes receivable book* and the latter in a *notes payable book*. There are different forms of these books. Simple forms which may be easily ruled on blank paper or for which ordinary journal paper may be used by ruling two extra lines, are shown in the illustrations below.

Notes receivable and notes payable *sheets* will be used in listing notes called for in this text simply because they are more convenient for school-room purposes. In offices they are usually bound and called *books*.

Listing Notes Receivable

In the following examples it will be seen that in recording each note, the date it was received, the name of the maker, the date of the note, the time, the due date, and the amount, are entered. This permits the bookkeeper to see at a glance on what date each note falls due, which is very important as will be explained later.

1. Jameson & Co. received the following notes during the month of January: Jan. 1, note of Samuel Spalding, dated Dec. 30, at 15 days, for $142.50; – – Jan. 5, note of C. J. Burns, dated Jan. 2, at 1 month, for $173.65; – – Jan. 9, note of Patterson & Page, dated Jan. 7, at 20 days, for $250; – – Jan. 12, note of John K. Wilson & Co., dated Jan. 9, at 60 days, for $376.42; – – Jan. 15, note of Robbins Bros. Co., dated Jan. 13, at 15 days, for $97.76; – – Jan. 19, note of C. J. Burns, dated Jan. 18, at 2 months, for $155.75; – – Jan. 26, note of F. B. Sexton, dated Jan. 25, at 30 days, for $183.94; – – Jan. 30, note of Patterson & Page, dated Jan. 28, at 90 days, for $349.60.

List these notes as shown in the following illustration. The due dates are given.

ILLUSTRATION 28

Notes Receivable

Date Rec'd		Maker	Date of Note		Time	Due Date		Amount	
19 Jan.	1	Samuel Spalding	19 Dec.	30	15 ds	19 Jan.	16	142	50
	5	C. J. Burns	Jan.	2	1 mo.	Feb.	2	173	65
	9	Patterson & Page		7	20 ds	Jan.	27	250	
	12	John K. Wilson & Co.		9	60 ds	Mar.	10	376	42
	15	Robbins Bros. Co.		13	15 ds	Jan.	28	97	76
	19	C. J. Burns		18	2 mos	Mar.	18	155	75
	26	F. B. Sexton		25	30 ds	Feb.	24	183	94
	30	Patterson & Page		28	90 ds	Apr.	28	349	60
								1729	62

What was the amount of notes due in January; in February; in March; in April? Patterson & Page's place of business is Minneapolis, Minn. Write the note received from them January 30. John K. Wilson & Co.'s place of business is St. Paul, Minn. Write the note received from them January 12.

Purpose and Method: Lessons 41, 42 and 43 if properly discussed should lay the foundation with each student for a very thorough understanding of notes and other negotiable instruments such as acceptances, which will be taken up later in the course. Additional drills should be given in finding due dates if necessary. Additional notes for entries which appear in the illustration may be prepared with advantage.

LESSON 44

Suggestion: Daily drills in calculating, using the chart and the various short methods, including aliquot parts, previously outlined, should be continued without intermission. Interest, discount, and other calculations will shortly be necessary. Simple problems in finding interest and discount may be introduced at this point with great profit.

Listing Notes Receivable

George C. Diehl & Sons, Buffalo, N. Y., received the following notes in February. List them as instructed in lesson 43.

Feb. 2, note of Martin Fowler, dated Feb. 2, at 20 days, for $125; – – Feb. 4, note of John L. Travers, dated Feb. 2, at 60 days, for $243.50; – – Feb. 9, note of R. J. Kelly & Co., dated Feb. 8, at 15 days, for $163.64; – – Feb. 12, note of Mallory & Duncan, dated Dec. 27, at 2 months, for $395.75; – – Feb. 16, note of Martin Fowler, dated Jan. 14, at 60 days, for $91.47; – – Feb. 18, note of R. J. Kelly & Co., dated Nov. 23, at 40 days, for $543.18; – – Feb. 22, note of Johnson & Johnson, dated Jan. 20, at 1 month, for $271.25; – – Feb. 23, note of Mallory & Duncan, dated Jan. 21, at 60 days, for $119.50; – – Feb. 25, note of James C. Reed, dated Nov. 26, at 3 months, for $379.70; – – Feb. 27, note of Mallory & Duncan, dated Feb. 24, at 2 months, for $492.75.

Note: The note received February 18 falls due on February 21, which is Sunday. Under the laws of most of the states this note would not be due until the day following, or February 22, which is Monday. If, however, February 22 is observed as a holiday the note would not fall due until the next day, or February 23. Formerly, notes maturing on Sunday or a holiday were due the day before, and in some states that rule is still followed. It is, however, becoming the general rule to consider paper falling due on Sundays and holidays as not being due until the day following.

Answer the following questions: (*a*) What was the amount of notes remaining unpaid at the close of business February 28? (*b*) If to raise money all the notes falling due in March were discounted March 1, what was the total amount of notes discounted, and what was the amount of the notes remaining on hand? (*c*) What notes, if any, were unpaid April 15? (*e*) If the note received February 27 had been discounted on March 25, what would have been the unexpired time; i.e., the time from March 25 until the due date of the note, and what would have been the discount if the note was discounted at 6%? (*e*) What would have been the proceeds of the note?

Purpose and Method: It is assumed that the student already has an understanding of such terms relating to percentage as, "amount," "discount," "proceeds," etc., in connection with calculating interest and discount. If not they should be explained. Appropriate drills in such calculations as already suggested will be helpful in preparing the student for more extensive exercises in similar calculations later on.

LESSON 45

Listing Notes Receivable

Billy Sweet & Co., 33 W. 42nd St., New York City, received the following notes in March. Make the proper entries on the notes receivable sheet.

Mar. 3, note of Pickering & Co., dated Mar. 1, at 30 days, for $178.85; – – Mar. 4, note of Darr & Davidson, dated Jan. 3, at 20 months, for $219.16; – – Mar. 6, note of A. P. Jefferson, dated Feb. 1, at 60 days, for $118.40; – – Mar. 9, note of Pickering & Co., dated Dec. 11, at 3 months, for $335.93; – – Mar. 15, note of D. A. Kramer & Co., dated Mar. 13, at 90 days, for $288.90; – – Mar. 15, note of D. A. Kramer & Co., dated Jan. 25, at 60 days, for $578.42; – – Mar. 17, note of Albert C. Morgan, dated Mar. 15, at 1 month, for $290.60; – – Mar. 20, note of Darr & Davidson, dated Nov. 30, at 4 months, for $685.45; – – Mar. 22, note of The Carlton Co., dated Mar. 5, at 60 days, for $137.40 – – Mar. 25, note of D. A. Kramer Co., dated Dec. 30, at 90 days, for $763.75; – – Mar. 26, note of Frank E. Gillespie Co., dated Mar. 25, at 2 months, for $279.56; – – Mar. 27, note of A. P. Jefferson, dated Jan. 30, at 60 days, for $311.21; – – Mar. 29, note of Darr & Davidson, dated Mar. 27, at 1 month, for $109.05; – – Mar. 31, note of The Carlton Co., dated Mar. 27, at 90 days, for $471.28.

Answer the following questions: (*a*) What was the total amount of notes received during the month? (*b*) What was the amount of notes maturing and paid during the month? (*c*) What was the balance remaining unpaid April 1? (*d*) What was the amount paid during the month of April? (*e*) What was the balance of notes remaining unpaid May 1? (*f*) What was the balance of notes remaining unpaid June 1?

Illustration of Simple Method of Finding the Results Called for in Lessons 43, 44 and 45

Arranging the information contained in illustration 28 in the form of the statement shown below will greatly assist in answering the questions asked regarding the notes received in the lessons referred to.

ILLUSTRATION 29

Notes Receivable

(Received)					(Paid)			
19 Jan	1	S.S.	Jan. 16	142 50	Jan	16		142 50
	5	C.J.B.	Feb. 2	173 65		27		250
	9	P.P.	Jan. 27	250		28		97 76
	12	J.K.W. & Co.	Mar. 10	376 42	Feb.	2		173 65
	15	R.B. & Co.	Jan. 28	97 76		24		183 91
	19	C.J.B.	Mar. 8	155 75	Mar	10		376 42
	26	T.B.S.	Feb. 21	183 91		18		155 75
	30	P.P.	Apr. 28	340 60	Apr	28		340 60

Observe that on the lefthand side of the above statement the notes are entered in the order received with due dates, and on the righthand side they are entered in the order in which they are due and paid. The footings in small figures at the end of each month in the righthand column show the total amount received in payment of matured notes. The balance remaining unpaid is shown by finding the difference between the footings of each side of the statement. The amount received in payment of the notes maturing each month may be found by adding the items for the month separately. From the lists of notes receivable you have prepared for lessons 43, 44 and 45 make similar statements.

NOTE: If ordinary ledger paper is available it may be used for the purposes of this illustration.

Observe that as each item in the righthand column of the statement is entered it *cancels* a corresponding item in the lefthand column. This has the effect of *eliminating* the note from the balance of those on hand. When all notes are paid the entire balance is eliminated since the footings of both columns would be equal. Paid notes are cancelled by a check mark (√). Unchecked items are therefore notes on hand unpaid.

PAID NOTES should be endorsed or receipted by the parties receiving payment therefor and returned to the maker, for the reason that he has redeemed them. They should be held by him as receipts showing that they have been paid. The simple endorsement of the payee is a good receipt but it is better if he writes above his signature, "Received payment on the within note" with the date of payment.

Purpose and Method: This lesson shows the first direct suggestion of the common form of the ledger account, but it should be noticed that it comes as a development with a distinct purpose in view. This method of approach, however, should not be confused with the so-called "ledger account method." That method deals with amounts arbitrarily stated and placed without any consideration of the transactions from which they were derived and without which they could not exist. In this method the fact represented in the transaction, and to some extent the motive lying behind the fact, are either stated or suggested, so that this use of the standard form of accounts is arrived at following a connected series of mental processes each based upon a preceding premise. The attention of both teacher and student is invited to the many similar exhibitions of correct educational methods as they are developed throughout the course.

LESSON 46

LISTING NOTES RECEIVABLE

Archer & Crane, Chicago, Ill., received the following notes. Make the proper entries.

NOTE: In ruling the notes receivable sheet use a full sized sheet of paper equivalent in length to an ordinary journal or cap sheet, which is fourteen inches long.

Apr. 3, note of Laurens Enos & Son, dated Mar. 30, at 60 days, for $290.65; – – Apr. 7, note of A. G. Batchelder & Co., dated Mar. 31, at 3 mo. for $117.80; – – Apr. 10, note of H. A. Bonnell Motor Co., dated Apr. 9, at 10 days, for $337.81; – – Apr. 12, note of John A. Wilson & Co., dated Apr. 7, at 2 mo. for $420; – – Apr. 18, note of Laurens Enos & Son, dated Apr. 16, at 60 days, for $312.15; – – Apr. 18, note of Laurens Enos & Son, dated Apr. 16, at 90 days, for $300; – – Apr. 24, note of Morrell & Co., dated Apr. 23, at 10 days, for $126.25; – – Apr. 24, note of Morrell & Co., dated Feb. 28, at 60 days, for $575.43; – – Apr. 28, note of H. M. Luzius & Co., dated Apr. 28, at 90 days, for $88.75; – – Apr. 30, note of Hyde Chemical Co., dated Apr. 27, at 45 days, for $227.50.

Prepare a statement similar to illustration 29 but provide about twice the size as the statement is to be continued for the month of May in lesson 47. In the right hand side enter only the notes maturing in April in the order of their due dates.

Answer the following questions: (*a*) What was the total amount of notes received during the month? (*b*) What was the amount of notes maturing and paid during the month? (*c*) What was the balance of notes on hand unpaid May 1? (*d*) What was the amount of these notes due in June? (*e*) What amount in July?

Purpose and Method: This lesson is intended to further develop the account form of statement. An account is a statement that will be properly defined later. Speak of it as a statement at this point. It is the purpose to have the student understand the nature of an account from its *use function* rather than its name.

LESSON 47

Listing Notes Receivable

This lesson shows a continuation of the notes receivable transactions of Archer & Crane for May which were begun April 1 in the preceding lesson. Enter the transactions on the notes receivable sheet prepared for that lesson, making the first entry on the first vacant line.

May 1, note of S. A. Miles, dated Apr. 27, at 4 months, for $500; – – May 5, note of H. A. Bonnell Motor Co., dated May 2, at 60 days, for $375.50; – – May 7, note of Fortescue & Co., dated Apr. 5, at 90 days, for $66.90; – – May 9, note of Bennett & Butler, dated May 7, at 30 days, for $175.25; – – May 10, note of The Marks Co., dated May 7, at 20 days, for $212.75; – – May 11, note of A. G. Batchelder & Co., dated May 7, at 2 months, for $316.55; – – May 14, note of J. G. Nassauer & Co., dated May 14, at 30 days, for $450; – – May 17, note of M. Grace & Co., dated May 15, at 90 days, for $600; – – May 21, note of A. H. Rivers, dated May 19, at 10 days, for $67.78; – – May 25, note of Morrell & Co., dated Apr. 28, at 1 month, for $137.70; – – May 28, note of A. H. Rivers, dated May 26, at 30 days, for $315.12; – – May 31, note of S. A. Miles, dated Feb. 28, at 4 months, for $400.

Enter all notes falling due in May received in both April and May in the order they mature; then in like manner enter notes maturing in later months in the order they fall due.

Continue the statement begun in lesson 46 so as to answer the following questions: (*a*) What was the total amount of notes received during the month? (*b*) What was the amount of notes received in April that were matured and paid in May? (*c*) Of the notes received during both April and May what was the amount of the balance on hand May 31? (*d*) How much of this balance was due in June; how much in July; how much in August? (*e*) In your statement enter the notes falling due in June in the order of their due dates and state their amount, and also the balance of notes that would be on hand June 30. (*f*) In like manner enter the notes in the order of their due dates maturing in July and state the balance of unpaid notes on hand. (*g*) If the notes maturing in August were discounted at bank on August 1 at 6% for the unexpired time, what would be the amount of discount paid at bank for the immediate use of the money? (*h*) Assuming that the notes were discounted make the entries under date of August 1 on the righthand side of the statement. (*i*) Are the total footings of the two columns in the statement equal?

Purpose and Method: In this lesson we have a still closer approach to the formal work of bookkeeping and the essential elements of an account have been made still more apparent in the preparation of the statement. In the checking process we have given the first training in important methods of accuracy and preciseness with which every teacher of bookkeeping is familiar. The method is but a continuation and development of what the student already knows, or of what he should quickly comprehend by suggestion.

LESSON 48

Negotiable Papers

In lesson 42 the "negotiability" of promissory notes was pointed out as one of their principal advantages. (The same advantage applies to acceptances, checks, and several other forms of business papers which will be considered later.) This advantage of being transferable lends to such papers the characteristics of *mediums of exchange* to such an extent that a large part of the world's business is transacted through such mediums, making it unnecessary to make but a small part of the total exchanges in actual money.

Negotiable papers are transferred by endorsement. This is a very simple process consisting of the payee or owner writing his name across the back and then delivering the paper to the one to whom it is transferred. When a note is transferred the payee becomes the *first* endorser. If it should be again transferred the next endorser would be known as the *second* endorser, etc.

Listing Notes Payable

The form of the notes payable book is identical with the notes receivable book shown in illustration 28 except that instead of the name of the maker, the name of the *payee;* i.e., the name of the party to whom the note is issued, is entered, also the *date issued* instead of the "date received," as shown in the first lefthand column.

Note: In preparing the notes payable record write in the headings with the greatest care. Carelessly written sheets should not be submitted. If they are they should be returned and the student should be required to rewrite them until they represent the very best work of which he is capable.

List the following notes as shown in illustration 30 on page 64. In listing these notes consider that the maker is yourself, or the party you represent as bookkeeper.

Jan. 2 issued note in favor of F. K. Nelson, dated Jan. 2, at 15 days, for $102.42; – – Jan. 2, note in favor of L. K. Knight & Co., dated Jan. 2, at 30 days, for $219.72; – – Jan. 4, note in favor of C. B. Austin, dated Jan. 4, at 20 days, for $98.97; – – Jan. 9, note in favor of Martindale & Sons, dated Jan. 7, at 1 month, for $150.30; – – Jan. 13, note in favor of F. K. Nelson, dated Jan. 13, at 15 days, for $75.40; – – Jan. 20, note in favor of C. B. Austin, dated Jan. 20, at 60 days, for $296.73; –– Jan. 26, note in favor M. P. Yoder & Co., dated Jan. 23, at 1 month, for $185.90; – – Jan. 28, note in favor F. K. Nelson, dated Jan. 28, at 2 months, for $125.62.

ILLUSTRATION 30

Notes Payable

Date Issued	Payee	Date of note	Time	Due Date	Amount
19 Jan. 2	G. K. Nelson	19 Jan. 2	10 ds	19 Jan. 17	102 42
2	L. K. Knight & Co.	2	30 ds	Feb. 1	219 72

NOTE: The note issued on January 9 was dated January 7 to agree with the date of the bill for which it was issued, the terms of which were one month. The bill issued January 26 was dated January 23 so that it would mature on the same date that the bill for which it was issued in payment matured. This is a common practice in issuing notes in payment of particular bills. In like manner, there is sometimes a delay in securing the proper signatures which makes it impossible to issue a note on the day it is written, as will be observed in some of the following transactions.

NOTE: Observe that the note issued January 13 falls due on January 28, which was Sunday. On what date would it be collectable?

Answer the following questions: (*a*) What was the total amount of notes issued in January. (*b*) Prepare a statement like the following illustration from which to answer the questions following. (*c*) Notice that on the righthand side of the statement the notes are entered in the order issued, and that on the lefthand side they are entered in the order in which they are due and paid. The footing, in small figures, of the righthand column at the end of the month shows the total amount of notes issued and should agree with the footing of the notes payable sheet. The footings, in small figures, in the lefthand column show the amount of outstanding notes paid and redeemed at the end of each month in the order they fell due. The balance of notes outstanding is shown by finding the difference between the footings of the two columns. The amount of notes that matured and were paid each month may be found by adding the items for the month separately.

ILLUSTRATION 31

Notes Payable

(Paid and Redeemed)					(Issued)				
19 Jan. 17			× 102 42		19 Jan. 2	G. K. N.	Due Jan. 17	× 102 42	
24			× 98 97		2	L. K. K. & Co.	Feb. 1	219 72	
29			× 75 40		4	C. B. A.	Jan. 24	× 98 97	
Feb. 1			219 72		9	M. & Sons	Feby. 7	150 30	
7			150 30		13	G. K. N.	Jan. 28	× 75 40	
23			185 90		20	C. B. A.	Mar. 21	296 73	
Mar. 21			296 73		26	M. & Co.	Feby. 23	185 90	
28			125 62		28	G. K. N.	Mar. 28	125 62	

(*d*) What was the amount of those notes due in January? (*e*) What amount was due in February? (*f*) What amount was due in March?

Note.—If the method of placing a cross mark opposite each amount in the statement as it is paid, as explained in the note in lesson 45, is followed it will quickly reveal any errors that have been made, although of course the order of placing the cross marks is exactly reversed since they are first entered in the righthand column instead of the left. These items paid in January are cross marked in the illustration.

Purpose and Method: The difference between notes receivable and notes payable should be emphasized. Excellent quiz exercises touching the responsibilities of each party to a note may be had but they should not be carried too far, certainly not much beyond the information with which the student has been supplied in his previous work.

LESSON 49

SIGNATURES

Signatures are required to a great many business papers. Such signatures should be carefully written to guard against counterfeiting and fraud. Those who sign their names to business papers and other documents should adopt a simple style of signature and always write their names as nearly in the same way as possible.

Writing the name of another person to any business paper is always a dangerous procedure and constitutes forgery unless properly authorized by the party whose name is written. Such authority is usually in the form of a "Power of Attorney," which is a formal document of great importance that must be properly signed, sealed, and delivered.

LISTING NOTES PAYABLE

George W. Hootman & Co., of St. Paul, Minn., issued the following notes for February. Make the proper entries for the same on a notes payable sheet.

NOTE: Where the note was issued on the day it was written only the date of issue is given.

Feb. 1, to Arthur Williams, at 15 days, $219.81; – – Feb. 3, to The Barnes Co., at 20 days, $109.14; – – Feb. 7, to R. Joyce & Sons, dated Dec. 23, at 2 mo., $322.56; – – Feb. 9, to Jones-Henderson Co., at 30 days, $146.83; – – Feb. 13, to Arthur Williams, at 15 days, $113.20; Feb. 7, Jones-Henderson Co., dated Dec. 27, at 19 days, $418.70; Feb. 17, to R. Joyce & Sons, at 1 mo., $211.45; – – Feb. 22, to Hammond Supply Co., dated Jan. 26, at 30 days, $198.50; – – Feb. 23, to The Barnes Co., at 60 days, $266.84; – – Feb. 27, to Arthur Williams, dated Dec. 13, at 3 mo., $172.12.

Prepare a statement similar to illustration 31 but about three times its size so there will be space for the notes issued in lesson 50. Then, from the notes payable sheet enter the notes issued, in the order they are shown, in the righthand column, and in the lefthand column enter the notes maturing in February in the order they mature, but do not enter the notes maturing after February 28.

Answer the following questions: (*a*) What was the total amount of notes issued in February? (*b*) What was the total amount paid on notes in February? (*c*) What was the balance owing on notes issued in February? (*d*) If February 25 were Sunday, when would the note falling due on that day be payable?

Purpose and Method: This lesson is but an extension of previous lessons in fixing in the student's mind a thorough understanding of how notes are listed and due dates are ascertained.

LESSON 50

Ledger Accounts

The form of statement you have been preparing, beginning with lesson 45, for the purpose of grouping certain facts so that you could answer the questions asked with the least difficulty, is the exact form of a ledger account. An *account* is simply a statement in which are entered items of like kind, relating to the same thing or person, arranged in the most convenient form for *arithmetical analysis and solution.* Such a statement when appearing in a ledger is known as a *ledger account.* Transferring items to such an account from the books in which the transactions were first recorded is called *posting.* You were posting when you were transferring the items from the notes receivable and notes payable sheets, to these statements preparatory to answering the questions called for.

The same form of account or statement may be used to great advantage in the analysis and solution of a great many of the problems connected with bookkeeping, as will be shown in the following lessons. Under appropriate headings related items of like kind may be gathered as they occur from day to day in these accounts so that at any time the problem they represent may be ready for arithmetical analysis and solution whether the account is kept in a special book or on separate sheets. The book in which such accounts are usually kept is called the *ledger.*

Listing Notes Payable

In this lesson the listing of notes issued by George W. Hootman & Co. is continued for another month. But one date is given for such of the following notes as were issued on the date they were written. When the date of the note and the date of issue were different, both dates are given.

The notes issued for the month were as follows:

Mar. 2, to Joseph T. Daly, dated Mar. 1, at 60 days, $271.27; – – Mar. 3, to Knapp Brothers, dated Feb. 28, at 20 days, $184.56; – – Mar. 8, to Joseph T. Daly, at 30 days, $155.78; – – Mar. 10, to Wilcox & Benton, dated Feb. 26, at 30 days, $337.92; – – Mar. 13, to Hoover & Co., at 60 days, $417.25; – – Mar. 14, to R. H. Shipley Co., at 1 month, $172.98; – – Mar. 17, to Joseph T. Daly, at 30 days, $219.47; – – Mar. 19, Knapp Brothers, dated Jan. 5, at 4 months, $322.40; – – Mar. 19, to Wilcox & Benton, dated Feb. 25, at 90 days, $504.72; – – Mar. 22, to Hoover & Co., at 30 days, $168.26; – – Mar. 24, to Knapp Brothers, at 60 days, $282.47; – – Mar. 26, to R. C. McLane, at 90 days, $115.75; – – Mar. 29, to R. H. Shipley Co., dated Feb. 3, at 3 months, $347.28.

List the above notes on the notes payable sheet.

Enter the notes on the statement begun in lesson 49 in the righthand column as instructed. Then, from the notes payable sheet for February and March, in the lefthand column enter the notes maturing in March in the order they mature, but do not enter the notes maturing after March 31.

When this has been done answer the following questions: (*a*) What was the total amount of notes issued in March as shown by the notes payable sheet—in February and March as shown by the statement? (*b*) What was the total amount paid on outstanding notes in March? (*c*) What was the balance owing on notes issued in February and March? (*d*) What was the amount of notes maturing in April, in May, and in succeeding months if any, that were issued in February and March? (*e*) Consider that all the notes maturing after March 31 were paid on the dates they were due and make the proper entries on the statement so they will appear in the order the notes were paid.

Observe that each item in the lefthand column of the statement *cancels* a corresponding item in the righthand column, and that when all notes issued have been paid all items in the statement are cancelled, or *balanced.* Check all cancelling items.

Purpose and Method: Direct reference to the ledger account at this point is intended to finally bring the student to an understanding of what an account is preparatory to its use as a form of statement in the solution of the problems that will be presented in the following lesson, but it should be emphasized that when used for any other purpose than a formal account in the ledger to which items are posted, it simply performs the function of a statement and should be referred to as a statement, and not as a ledger account to avoid the possibility of the student acquiring the idea that wherever this statement is used it is a ledger account. When this form of statement is used it should not be referred to as "the ledger account method" except when it appears in the ledger and receives items posted from other books. This will avoid confusion in reaching a proper understanding of a ledger account as it will later appear in formal sets of books. The word "account" may only be used at this point in the sense of a *statement.*

LESSON 51

Listing Amounts Owed by or to Persons

Read carefully the first three paragraphs of lesson 41. In the first paragraph it is stated that one may *owe* for what he purchases, that he may *be owed* for what he sells, and that in either instance a promise to pay is expressed or implied.

It is when immediate payment for a purchase is not made that the condition of owing or being owed *is created,* and an oral or written promise is made or implied. You have been taught how to record or list written promises when made in the form of promissory notes, whether received from others (notes receivable) or issued to others (notes payable) but you have had no instruction with regard to recording oral promises.

Refer to illustration 15, page 26. This illustration shows a list of purchases made including the names of those who *are owed* for the goods purchased from them. Illustration 18, page 34, shows a list of sales made including the names of those who *owe* for the goods sold to them. In like manner, illustrations 19 and 22 show lists of cash received and paid including the names of those from whom cash was received and to whom cash was paid.

Our next step is to list the purchases or sales *made with a particular party.* This is done by preparing a statement under his name in which an entry is made for each purchase or sale transacted with him, and also of each payment he has received or made. For instance, a statement with a person from whom purchases are made will show, on one side (the righthand side), the amount, date, and terms of each purchase, and on the other side (the lefthand side), the amounts and dates of such payments as have been made to him; (see illustrations 32 and 33) while a statement with a person to whom sales have been made will show, on one side (which in this case is the lefthand side), the amount, date, and terms of each sale, and on the other side (the righthand side), the amounts and dates of such payments as have been made by him (see illustration 34). Such statements show at any time what our dealings have been with the person with whom we transact business.

Such statements when kept in a ledger to which items are posted from other books in which transactions are listed are known as *personal accounts.*

Listing Amounts Owed to Persons

The following purchases were made by Baker & Co. from William B. Garrison, 1210 Union Avenue, for the month of May.

May 4, % 10 days, $105.73; – – May 13, % 30 days, $251.16; – – May 19, % 10 days, $128.72; – – May 26, % 5 days, $95.20.

Prepare a statement of these purchases as shown in illustration 32. Observe that the items are entered on the righthand side of the statement.

Illustration 32

William B. Garrison 1210 Union Ave

(Ours)

| | | |

ILLUSTRATION 33

William R. Garrison 1210 Union Ave

(Paid) (Owed)

19						19					
May	14		105	78		May	4	4/10 days		105	78
	29		128	72			13	4/30	" June 12	251	16
	31		95	20			19	4/10	" May 29	128	72
			329	70			26	4/5	" " 31	95	20
										329	70

NOTE: It is not intended that any statement showing amounts owing to or by persons shall be either footed or ruled in ink. They may be footed in small, lead pencil figures, as shown in the illustration, *for purposes of calculation*. These figures, however, should be written up close under the last line on which an amount is written and, while they are not expected to be erased, they should not be written in ink.

(*d*) What was the total amount paid on bills maturing in May? (*b*) What was the balance owing for any unpaid bills May 31? (*f*) Who owes, and who is owed?

Purpose and Method: The student has taken his first step in this most important class of accounts. It should be observed that any use of the terms usually employed to designate who owes and who is owed has been carefully avoided. These terms, when used, apply only to personal accounts, but they will be introduced at a later time when their use will in no way be misunderstood or lead to confusion, which so frequently follows their use at the beginning of the course. Once the student can determine with certainty who owes or who is owed in a given transaction no confusion or trouble will follow in disposing of transactions affecting persons, no matter what terms may be used.

LESSON 52

PERSONS

Persons, in a bookkeeping sense, include individuals, firms, and corporations. While a firm is composed of individual partners, and corporations are composed of individuals who are stockholders, each is considered *as a person* in the recording and disposing of business transactions. While a firm, strictly speaking, is not a person, the partners who are responsible for the transactions of the firm are considered as a single unit. A corporation is defined as "A fictitious person created by law." Therefore, an account with either an individual, a firm, or a corporation is classified as a *personal account.*

In lesson 46 the statement prepared showed the amounts *owed to a person* from whom purchases were made, and the amounts paid on these purchases. In this lesson you will prepare a statement showing the amounts *owed by a person* to whom sales were made, and the amounts he has paid. You should carefully observe the difference in the results shown on each side of these statements.

Listing Amounts Owed by Persons

During October Warner & Co. made the following sales to Albert K. Kaufman, 25 Spring Garden Avenue:

Oct. 2, % 30 days, $126.19; -- Oct. 8, % 15 days, $72.45; -- Oct. 14, % 10 days, $205.40; -- Oct. 18, % 60 days, $172.85; -- Oct. 29, % 20 days, $45.89.

Prepare a statement like the following illustration, showing on the left-hand side the list of sales to Mr. Kaufman for October, and on the righthand side the bills maturing and paid in October. Answer the following questions:

ILLUSTRATION 34

Albert K. Kaufmann (Owes) 25 Spring Garden Ave (Paid)

19			Date Due		19			
Oct	2	% 30 days	Nov 1	126 19	Oct	23		72 45
	8	% 15 "	Oct 23	72 45		24		205 40
	14	% 10 "	" 24	205 40				
	18	% 60 "	Dec 17	172 85				
	29	% 20 "	Nov 28	45 89				
				622 78				278 85

(*a*) What was the total amount of sales to Mr. Kaufman for the month? (*b*) What amount was due and paid during the month? (*c*) What was the balance remaining unpaid October 31? (*d*) If the bills falling due in November were paid, what would be the balance owing by Mr. Kaufman November 30?

Purpose and Method: Interesting supplementary information may be given by the teacher with regard to the composition of firms and corporations. Comparisons drawn out by careful quizzing should fix the difference in the results shown by the statement of one who owes and one who is owed. Oral drills in listing purchases and sales in statement form may be employed to great advantage whenever opportunity offers.

LESSON 53

The Things Other than Purchases and Sales for Which Persons May Owe or be Owed

A person may owe or be owed for other things than goods purchased or goods sold. *He may owe or be owed for anything of value, received or given;* such as cash, notes, property, rent, wages, interest, services, or for anything of value that may be transferred from one party to another which is not paid for at the time the transfer is made. For instance, A may loan money to B,—B owes A, and A is owed by B. C may rent a property from D. If C does not pay for the rent when it is due, C owes D, and D is owed by C.

Listing Items Owed to Persons

A. M. Hartford made the following purchases from Garwood & Co., 59 State St., during January.

Jan. 3, % 10 days, $61.90; – – Jan. 3, % 15 days, $72.85; – – Jan. 15, % 15 days, $138.97; – – Jan. 16, % 10 days, $16.23; – – Jan. 21, % 30 days, $248.76 – – Jan. 27, % 30 days, $83.86.

Prepare a statement as follows: (*a*) Show on the righthand side a list of purchases after the manner suggested in illustration 32. (*b*) Determine the due dates and enter on the opposite side of the statement under its due date the cash received in payment for each bill maturing during the month. (*c*) Assume that on January 31 A. M. Hartford issued a check to Garwood & Co. in payment of bills maturing in February under special agreement with them by which Mr. Hartford will later receive an allowance for paying the bills before they were due, and make the proper entries on the statement. (*d*) Does Mr. Hartford owe Garwood & Co., or do Garwood & Co. owe Mr. Hartford? (*e*) Are they, or are they not in the same position with reference to each other that they were before the transactions for the month were made? (*f*) Suppose Garwood & Co. had accepted Mr. Hartford's notes dated January 21 and 27, at 30 days, in payment of the two bills purchased on those dates. Would the notes have cancelled Mr. Hartford's indebtedness to Garwood & Co.? (*g*) If they were shown on the lefthand side of Garwood & Co.'s statement (which would be proper) would it have in any way changed the amount of Mr. Hartford's indebtedness to Garwood & Co.?

Purpose and Method: The preceding questions should be supplemented by any others that will serve to present all possible angles of the principles of owing and being owed. The questions (f) and (g), above, are intended to illustrate the point that a note in such a case simply changes an oral to a written promise.

LESSON 54

Definition of A Business Transaction

Frequent use of the word "transactions" has been made in previous lessons.

A business transaction is an *exchange* between persons of something for something having a money value; that is, one person *receives* something of value from another for which he *gives* something of equivalent value in exchange.

Sometimes exchanges are not made by both parties at the same time, that is, the exchange, or transfer, is made by one party but not by the other, the transfer by the second party being made at *some future time.*

It is during the interval of time between the time the exchange is made by the first party and the exchange in payment is made by the second party that the second party *owes* the first party, and the first party is *owed* by the second party. The time elapsing between the dates of these exchanges is known as the "term of credit."

During the term of credit the expressed or implied promise of the one who owes continues. The amount of his obligation to the one he owes is *cancelled* as soon as he complies with his promise.

Where an oral promise as it appears in a personal statement, or account, is changed to a written promise in the form of a promissory note, while the oral promise is cancelled in the statement *the original promise continues until the note is paid.*

Listing Items Owed by Persons

A wholesale grocer sold to Lambert & Sons, 915 Locust St., the following bills of merchandise during the month of September:

Sept. 1, % 30 days, $169.45; – – Sept. 4, % 60 days, $288.16; – – Sept. 8, % 90 days, $329.45; – – Sept. 11, % 60 days, $97.21; – – Sept. 16, % 30 days, $141.80; – – Sept. 27, % 60 days, $393.62.

Prepare a statement (*a*) showing on the lefthand side a list of these purchases after the manner suggested in illustration 34. (*b*) Determine the due dates and enter on the opposite side of the statement, under its due date, the cash received in payment for each bill maturing during the month. (*c*) Assuming that the bills falling due in October were paid September 30, make the proper entries on the opposite sides of the statement, and find the balance still owing by Lambert & Sons for the remainder of the bills unpaid. (*d*) Then, assuming that the remainder of the bills were paid on their due dates make the entries for each payment received. (*e*) Suppose Lambert & Sons, instead of paying cash for bills maturing in November and December, had, on September 30, given their notes maturing on the due dates of the bills, would these notes have cancelled Lambert & Sons indebtedness on September 30?

Purpose and Method: This and the preceding lesson is intended to bring out the fact that the issuing of a note in payment of a bill does not cancel the indebtedness of the party who owes, as will be more fully developed in the next two lessons.

LESSON 55

The Student to Occupy the Position of a Bookkeeper

In this and future lessons only the name of the party who owes or is owed will be given, the other party to each transaction being some person, firm, or corporation represented by the student and for whom the student is preparing the statements. In other words, the student will be acting in the capacity of book-keeper for the concern that transacted the business with the parties named.

Listing Items Owed to Persons for Some of Which Notes Were Later Given in Payment

The proprietor instructs the bookkeeper as follows: "We have purchased from B. F. Bond & Co., Spokane, Wash., the following bills for the month of November:"

Nov. 2, % 30 days, $28.42; – – Nov. 7, note 30 days, $193.68; – – Nov. 8, % 60 days, $73.19; – – Nov. 14, note 60 days, $121.86; – – Nov. 29, % 30 days, $76.92; – – Nov. 23, note 60 days, $132.87; – – Nov. 27, note 90 days, $291.60; – – Nov. 30, % 30 days, $147.83.

PAYMENTS

Nov. 7, issued note at 30 days, $193.68 (instead of "cash" write "Note at 30 ds." in the explanation column); – – Nov. 14, issued note at 60 days, $121.86; Nov. 23 issued note at 60 days, $132.87; – – Nov. 27 issued note at 90 days, $291.60; – – Dec. 2, cash, $28.42; – – Dec. 18, cash, $76.92; – – Dec. 30, cash, $147.83; – – Jan. 7, cash, $73.19.

Prepare a statement as follows: (*a*) List the purchases after the manner suggested in illustration 31. (*b*) What was the total amount of purchases for the month? (*c*) On November 30 what was the amount of the bills for which notes had been issued? (*d*) What was the amount of cash issued in December in payment of bills maturing in that month: (*e*) What amount of cash was paid in January? (*f*) Suppose you were keeping books for Walter & Co. Write a note issued in payment of bill purchased November 7. (See lesson 41) (*g*) List the notes payable issued as instructed in lesson 48, and prepare the statement as shown in illustration 30.

Purpose and Method: It will be seen that this lesson not only shows the first entries for notes issued in payment of bills as they should appear in the personal account of the party who is owed, but it reviews the writing of notes and preparing of statements for notes payable. The work has been most carefully graded as the student proceeds, which is another indication of sound educational methods.

LESSON 56

The Student's New Relation to the Work He is Doing

The student should remember that he is now acting as a bookkeeper or clerk in doing the work that is assigned to him. Prior to this time he has viewed the problems from the standpoints of both the party who owes and the party who is owed. While he must continue to keep in mind the relation of both parties to the transaction, he now in a sense represents and stands in place of one or the other of these parties.

A better understanding of his position will be had if he remembers that in transactions between persons each keeps a record of them in his own books. Each has his own bookkeeper and therefore the problems that would be presented to either one of these bookkeepers would be those that grow out of *his side of the transaction.* For instance, where a transaction would represent a *sale* of merchandise to one person, it would represent a *purchase* to the other, consequently, what would be a sales entry in one set of books would be a purchase entry in the other set of books—what would be a *receipt of cash* in one set of books would be a *payment of cash* in the other, and in like manner, a note issued would be classed as a *notes payable* in one set of books, while in the other set it would be classed as a *notes receivable.*

The student should therefore have clearly fixed in his own mind just which party he is representing. In this particular lesson it will be the one who is owed. Later in the course consideration will be given to the one who owes, who receives a service or renders a service, and who receives interest or pays interest, etc.

Listing of Items Owed by Persons

LISTING OF ITEMS OWED BY PERSONS FOR SOME OF WHICH NOTES WERE LATER RECEIVED IN PAYMENT

The Proprietor: "We have made the following sales to Bartlett Bros., 196 Main St., during the month of June on the terms stated:"

June 1, a/c 10 days, $71.12; – – June 2, cash, $46.75; – – June 4, note at 60 days, $184.45; – – June 9, a/c 90 days, $750; – – June 14, note at 10 days, $75; – – June 18, a/c 30 days, $16.15; – – June 22, note at 4 months, $248.78; – – June 27, cash, $24.50; – – June 30, a/c 60 days, $356.22.

The following items were received in settlement during June:

June 4, cash, $46.75; – – June 8, note at 60 days, $184.45; – – June 10, cash, $71.12; – – June 15, note at 10 days, $75; – – June 27, cash, $24.50.

NOTE: The note for the sale of June 4 was not received until June 8. This time was allowed for the goods to arrive at destination and be checked up with the bill before the note was written. The note could have been dated back to June 4 but in many instances customers are not required to make settlement until after the goods have been received and the bill has been found to be correct.

Prepare the statement. What is the balance owed by Bartlett Bros. June 30 as shown by the statement?

The following items were received in settlement during July. Enter them on the same statement:

July 9, note at 60 days, $750; – – July 18, cash, $16.15; – – July 22, note at 3 months, $248.78; – – July 30, note at 30 days, $356.22.

Observe that for the sale of June 9, % 90 days, a note was received July 9 at sixty days, which would make the note mature on the same date the bill would have matured. This transaction shows two things, first, that the oral promise was changed to a written promise, and second, that Bartlett Bros. were doubtless requested to remit their note so that it might be discounted at bank and the proceeds secured for use sixty days sooner than would have otherwise been possible. The same thing is suggested in the sale of June 22 for note at four months. This note was not received for some reason until July 22, when it was drawn for three months, and likewise, the sale on June 30, % 60 days, was settled July 30 by a note at thirty days. As each of these notes were negotiable they could be sold to the bank for cash less the discount for the unexpired time. Read lesson 48.

Proceed as follows: (*a*) Complete entering the items in the statement. (*b*) Write the note received June 8, naming C. H. Garner as the payee. (*c*) Write the check drawn on the Second National Bank received June 10. (*d*) Check each item received in payment during the month of June with the corresponding item on the lefthand side of the statement. The unchecked items will show the items that were not settled for until July 1.

Purpose and Method: In this lesson a number of additional points have been called to the student's attention. If the method of this text is carried out as intended each new idea suggested in each lesson will be frequently reviewed. Students should be quizzed daily upon work that has been completed. No educational method has ever been successful that did not require a sufficient repetition of work already accomplished to fix the principles involved in the minds of the students.

LESSON 57

TERMS OF CREDIT

In the preceding transactions involving purchases and sales, and later in transactions with persons, the terms on which the purchases and sales were made were given.

Such terms are usually fixed by the seller, although they may vary in different cities or sections of the country and also for different kinds of merchandise. They are subject to change in any transaction by agreement of the parties. Where terms of sale are published in connection with a certain line of goods it is understood that those terms are accepted unless a specific agreement upon other terms is made.

A term of credit is the time between the date of the bill and the date on which it falls due.

A term of discount is the limit of time in which a discount for prepayment is allowed. Such a discount is known as a *merchandise discount.*

The terms written on a bill such as: "Net 60 days, 2% for cash in 10 days" mean two things. One is, that the total amount the bill will be due in 60 days from its date. "2% for cash in 10 days" means that if the bill is paid on or before 10 days from its date an allowance of 2% may be deducted. That is, if the bill were for $250 an allowance of $5 (or 2% of $250) is deductible so that $245 would pay the bill in full.

Cash discounts are offered for two reasons, (*a*) to secure prompt payment of bills so that the use of the money may be had for other purposes, and (*b*) to eliminate the credit risk of selling goods on long terms of credit when something might happen between the time of the sale and the time the bill was due which would make it difficult or impossible to collect, as for instance the failure of the buyer, or his inability to pay.

The amount of discount allowed for cash varies greatly for different kinds of merchandise. For instance, in the wholesale grocery business for such staple articles as flour, dried fruits, fresh fruits, cheese, hams, shoulders and other smoked meats, lard, etc., cash discounts are seldom allowed, in fact, they are all sold "net cash" as a rule.

Calculating Discounts

After the discount on a given sum at a certain rate is ascertained the discounts at different rates can frequently be found in the quickest and most accurate way by taking aliquot parts. For instance, having found the discount on a given sum at 2%, the discount at 3% would be found by adding one-half of the discount at 2%, at 3½% by adding one-half and one-fourth of the discount at 2%, at 1½% by deducting one-fourth of the discount at 2%, etc. Show solution as it appears in illustration 35.

What is the discount on $312.36 at 2%, 3½%, 1½%, and 4%?

Illustration 35

Solution

1. $312.36 at 2% = $6.23

at 3½% = 6.2472 + 3.1236 + 1.5618 = $10.93

at 1½% = 3.1236 + 1.5618 = $6.49

at 4% = 6.2472 + 6.2472 = $12.49

What is the discount on:

1. \$312.36 at 2%; – – 3½%; – – 1½%; – – 4%.
2. \$597.76 at 1½%; – – 2%; – – 3%; – – 2½%.
3. \$1246.74 at 4½%; – – 1½%; – – 3%; – – 2½%.
4. \$24.35 at 2%; – – 5%; – – 1½%; – – 3½%.
5. \$768.95 at ½%; – – 3½%; – – 5½%; – – 2%.
6. \$2438.12 at 2%; – – 3½%; – – 1½%; – – ½%.
7. \$288.29 at 3%; – – 5%; – – 2½%; – – 3½%.
8. \$28.42 at 2%; – – 3%; – – 2½%; – – 4%.
9. \$396.32 at 1%; – – 2½%; – – 3½%; – – 3%.
10. \$828.61 at 2%; – – 1½%; – – 4%; – – 3%.

11. If a 3% discount on a bill of \$537.50 was offered, and the money could be borrowed at the rate of 2% for the same length of time, what would be saved in borrowing the money?

12. If a merchant bought a bill for \$6350 at 4 months, what could he have saved in discount if he had paid one-third of the bill in 1 month less 3%, another third in 2 months less 2½%, and the remainder in 3 months less 2%?

LESSON 58

Calculating Merchandise Discounts

The following bills were received by a merchant on the dates named offering discounts shown:

Oct. 1, \$245.80, terms 2% 10 days, net 30 days; – – Oct. 2, \$716.64, terms 3% 10 days, net 60 days; – – Oct. 4, \$71.75, terms 1% 10 days, net 30 days; – – Oct. 6, \$723.27, terms 3½% 10 days, net 90 days; – – Oct. 16, \$501.07, terms 1½% 10 days, net 60 days; – – Oct. 18, \$18.75, terms 1½% 5 days, net 30 days; – – Oct. 20, \$1090.60, terms 2½% 10 days, net 60 days; – – Oct. 22, \$855.35, terms 4% 10 days, net 4 months; – – Oct. 24, \$456.69, terms 3½% 10 days, net 90 days; – – Oct. 27, \$397.50, terms 2½% 10 days, net 3 months; – – Oct. 30, \$1445.16, terms 2½% 10 days, net 3 months; – – Oct. 31, \$278.78, terms 4½% cash, net 4 months.

Note.—Names of persons from whom purchases were made are omitted to save time.

Note: "2/10, n/30" is the terms of the first item abbreviated. Other terms should be abbreviated in like manner when preparing the record, as is shown in illustration 36.

Answer the following questions: (*a*) What were the total purchases for the month? (*b*) What was the discount on each bill? (*c*) What was the net amount or proceeds of each bill? (*d*) What was the total amount of the discounts? (*e*) What was the total amount of cash issued in payment of the bills? Prepare the problem as shown in illustration 36, filling in the omitted discounts and proceeds.

Purpose and Method: The illustration is useful since it shows a systematic solution of the problem, and further because it conforms closely to the type of a book kept for the purpose of recording discounts which are offered when bills are received, approved, and turned over to the bookkeeper for record.

ILLUSTRATION 36

Purchase Discounts

Date		Purchased From	Terms	Amount		Discount		Proceeds	
Oct	1		2% 10 ds; n. 30 ds	245	80	4	92	240	88
	2		3% 10 ds; n 60 ds	716	64	21	50	695	14
	4		1% 10 ds; n 30 ds	71	75		72	71	03
	6		3½% 10 ds; n 90 ds	723	27	25	31	697	96
	16		1½% 10 ds; n 60 ds	501	07	7	52	493	55
	18		1½% 5 ds; n 30 ds	18	75		28	18	47
	20		2½% 10 ds; n 60 ds	1090	60				
	22		4% 10 ds 4 mos	855	35				
	24		3½% 10 ds; n 90 ds	456	69				
	27		2½% 10 ds; n 3 mos	397	50				
	30		2½% 10 ds n 3 mos	1445	16				
	31		4½% Cash, n 4 mos	278	78				

LESSON 59

DISCOUNTING BILLS INCREASES THE USEFULNESS OF CAPITAL

The importance of taking advantage of every discount offered goes very much beyond the reduction affected in the cost of the goods. No better evidence of a man's good credit can be had than that he discounts his bills. Even if he has to borrow money to do so it shows his credit is A-1 because he would be unable to borrow from banks or elsewhere if his credit were not good.

Another point in offering discounts to customers should not be overlooked. Instead of waiting until the full term of credit has expired it permits the seller to make an *earlier use of his money*. Consequently he can operate his business on a much smaller capital. For instance, if the sum total of a merchant's investment is $10000 and he sells his goods on an average of four months credit he would be able to sell his goods and reinvest his money three times a year. In other words, his $10000 does the work of $30000 of capital for one year. If all bills for goods sold were discounted in ten days he could reinvest his entire capital every ten days, or thirty-six times in a year. This would be the equivalent of $360000 capital invested for one year. Of course, for this privilege of reinvesting he would have to pay a price equivalent to the discounts retained by his customers for payment of the money before it was otherwise due and payable.

In those cases where the purchaser does not have the cash, accepting notes maturing on the due dates of bills which may be discounted at bank is another method adopted by business men to secure a larger use of their money.

NOTE: These reinvestments of the same capital during the year are known as "turnovers." In the illustration given above in one instance there would be three turnovers in a year, and in the other there would be thirty-six.

CALCULATING MERCHANDISE DISCOUNTS

John W. Brown & Co. purchased bills during the month of November on the dates, for the amounts, and on the terms stated, as follows:

Nov. 1, $365.50, terms 2½% for cash, net 30 days; – – Nov. 3, $913.35, net 90 days less 3% with 1% additional allowed for each 30 days before maturity that the bill is paid; – – Nov. 5, $68.95, terms 1½% 10 days, net 30 days; – – Nov. 7, $138.10, terms 2½% 5 days, net 60 days; – – Nov. 7, $231.11, terms 3% 5 days, net 3 months; – – Nov. 10, $446.48, terms 1½% 10 days, net 60 days; – – Nov. 12, $922.23, terms 4% 10 days, net 4 months; – – Nov. 13, $722.18, terms 3½% 10 days, net 4 months; – – Nov. 17, $258.82, terms 4½% 5 days, net 60 days; – – Nov. 21, $316.27, terms 1½% 10 days, net 60 days; – – Nov. 24, $2513.17, terms 2% 10 days, net 60 days; – – Nov. 27, $745.91, terms 2¼% 10 days, net 60 days; – – Nov. 30, $1462.98, terms 2¾% 10 days, net 60 days.

NOTE: The terms of the transaction of Nov. 3 above mean that if the bill is not paid until the expiration of 90 days 3% of the total amount may be deducted, but if it is paid 30 days sooner, an additional 1%, or 4% in all, may be deducted. If the bill is paid on or just before the expiration of the first 30 days, 2% additional, or 5% in all, may be deducted. If paid within 10 days, from the date of the bill, another 3%, or 6% in all, may be deducted. This is not an uncommon term of credit extended in connection with some lines of goods.

Prepare the problem as shown in illustration 36 and answer the following questions: (*a*) What were the total purchases? (*b*) What was the discount and proceeds of each bill? (*c*) What was the total amount of discounts? (*d*) What was the total amount of cash necessary to pay all of these bills less discount? (*e*) If the purchaser did not have the cash and he could borrow it at the rate of 1½% per 30 days, or month, if he borrowed the amount of each bill as received, what would be his saving in discount on each bill, and what would be his total saving in the payment of all his bills; i.e., how much would be the difference between the discounts allowed to him and the amount he would have to pay as interest on the money borrowed? In answering this question a separate calculation should be made. See if you can rule a paper in proper form to show the saving on the payment of each bill.

Purpose and Method: This is a further drill in calculating discounts following the method employed by business men in determining upon whether to borrow money to pay bills to get discounts. It is a most valuable lesson and should be most carefully considered.

LESSON 60

Finding the Interest or Discount on Promissory Notes and Other Negotiable Paper

Interest is the use of money the cost of which is paid when the money borrowed is due.

Discount is the use of money the cost of which ispaid when the money is borrowed or loaned.

In the former the borrower has the use of the total amount borrowed until the interest is paid, while in the latter the lender has the use of the discount from the date of discount to the date of maturity.

In the previous lessons we have calculated merchandise discounts allowed for the prepayment of bills. Such discounts involve only two elements: (*a*) *the amount* and (*b*) *the rate of discount.*

In calculating the interest or discount on promissory notes and other negotiable instruments a third element, that of *time,* is involved. As you have already learned, *the due date* is determined by counting the stated time forward from the date of the paper.

When a note is made *with interest* the interest begins to accrue from the date of the note and continues until the date of its payment. When a note is *discounted* the discount is calculated for the *unexpired time;* i.e., the time from the date of discount to the date of maturity.

Banks discount notes for the *exact number of days* between the date of discount and the date of maturity. For instance, a note dated June 10 at 60 days would mature August 9. If discounted June 20 *the term of discount* would be the *unexpired time* between that date and the due date of the note August 9, or fifty days. If discounted at the rate of 6% the discount would be the equivalent of the interest on the face of the note for fifty days, but the borrower would have the use of only the *proceeds* of the note and the bank would have the use of the discount from the date of discount until the due date of the paper. Had the money been borrowed at bank on a note *with interest,* the borrower would have had the use of the full *face value* of the note.

Calculating Interest on Promissory Notes and Other Negotiable Paper

Ordinary interest is usually calculated on the basis of twelve months or 360 days to a year for the reason that this method is more convenient and is generally used.

Six per cent is the legalized rate in most states and lends itself readily as a sort of basic rate for such calculations, hence there are a number of methods for calculating interest based on the rate of six per cent for 360 days.

Of these the *aliquot parts method* is perhaps the best since it is the shortest and when properly understood is the most accurate. It is selected for use in this text because the student from his previous training in calculating by aliquot parts will have little difficulty in understanding and using it.

The aliquot parts method is based on the fact that the interest on $1 for 360 days at 6% will amount to 6 cents. Therefore:

One cent, which is one-sixth of six cents, will accrue in one-sixth of 360 days, or *60 days* (or 2 months).

One mill, which is one-tenth of one cent, will accrue in one-tenth of 60 days, or *6 days*.

As *one cent* is one one-hundredth part of *one dollar*, or stated decimally .01, pointing off *two* places in the amount on which interest is to be calculated will give the interest for 60 days.

As *one mill* is one one-thousandth part of *one dollar*, or stated decimally .001, pointing off *three* places in the amount on which the interest is to be calculated will give the interest for 6 days. For any number of days other than 60 days or 6 days the aliquot part of the interest for 60 days or 6 days is found, hence we have the rule:

(*a*) **Point off two places in the principal and it becomes the interest for sixty days.**

(*b*) **Point off three places in the principal and it becomes the interest for six days.**

(*c*) **For any other number of days take aliquot parts of the interest for sixty or six days.**

For instance:
(1) The interest on $460 for 60 days equals $4.60.
(2) The interest on $460 for 6 days equals $.46.
(3) The interest on $460 for 30 days (which is $\frac{1}{2}$ of 60 days) equals ($\frac{1}{2}$ of $4.60) $2.30.
(4) The interest on $460 for 30 days (which is 5 times 6 days) equals $2.30.

(5) The interest on $460 for 33 days (which is ½ of 60 days plus ½ of 6 days) equals ($2.30 plus $.23) $2.53.

(6) The interest on $460 for 27 days (which is ½ of 60 days minus ½ of 6 days) equals ($2.30 minus $.23) $2.07.

(7) The interest on $460 for 45 days (which is ¼ less than 60 days) equals ($4.60 minus $1.15) $3.45.

(8) The interest on $460 for 46 days (which is ¼ less than 60 days plus ⅙ of 6 days) equals ($3.45 plus $.08) $3.53.

(9) The interest on $460 for 47 days (which is ¼ less than 60 days plus ½ of 6 days) equals ($3.45 plus $.15) $3.60.

Problems

1. Write the interest for 60 days at 6% on the following amounts:

$260.; $235.50; $186.40; $24.75; $518.73; $12.48; $19.56.
$2.60; $2.355; $1.864; $.2475; $5.1873; $.1248; $.1956. Answers.

Note: When a fraction of a cent appears in a *final result*, if the fraction equals one-half cent or more, call it one cent, if less, drop it. Under this rule the results for the above problems will be read as follows:

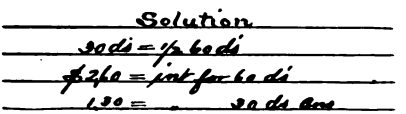
$2.60; $2.36; $1.86; $.25; $5.19; $.12; $.20.

2. Write the interest for 6 days at 6% for the amounts stated in the preceding problem.

3. Find the interest on $260 for 30 days at 6%.

Explanation

Pointing off two places in the principal equals $2.60, the interest for 60 days. Thirty days is one-half of 60 days, therefore, one-half of $2.60, or $1.30, equals the interest for 30 days.



4. Find the interest for 30 days at 6% on the amounts given in problem 1.

Note: These amounts may be written or stated orally. It will be noticed as the student proceeds in finding the interest by this method in most instances only results are written. For instance, in the preceding problem for the first result it is necessary to write only $1.30, the division being made without the use of written figures.

LESSON 61

FINDING THE INTEREST AT 6% ON DIFFERENT AMOUNTS FOR DIFFERENT PERIODS OF TIME

1. Find the interest at 6% for 3 days on the following amounts:
$316.65; $412.42; $18.10; $1025.75; $617.71;
$64.40; $125.25; $1122.46; $1000.

NOTE: One-half the interest for 6 days is the interest for 3 days.

2. Find the interest at 6% for 9 days on the amounts given in problem 1.

NOTE: The interest for 6 days plus one-half the interest for 6 days is the interest for 9 days.

3. Find the interest on the amounts stated in problem 1 for 8 days.

NOTE: The interest for 6 days plus one-third of the interest for 6 days is the interest for 8 days.

4. Find the interest on the amounts in problem 1 for 10 days.

NOTE: One-sixth of the interest for 60 days is the interest for 10 days.

5. Find the interest on the amounts in problem 1 for 11 days.

NOTE: Deduct one-sixth of the interest for 6 days and to the difference add the interest for 6 days, or take one-sixth of the interest for 60 days and increase it by one-tenth of itself.

In like manner, the interest on any amount at 6% is found by taking aliquot parts of the interest for 6 or 60 days as follows:

For 12 days take one-fifth of the interest for 60 days or twice the interest for 6 days.

For 13 days add one-sixth of the interest for 6 days to twice the interest for 6 days.

For 14 days add one-third of the interest for 6 days to twice the interest for 6 days.

For 15 days take one-fourth of the interest for 60 days, or find two and one-half times the interest for six days.

For 16 days take one-fourth of the interest for 60 days and add one-sixth of the interest for 6 days, or take one-sixth of the interest for 60 days and add the interest for six days.

For 17 days take one-fourth of the interest for 60 days and add one-third of the interest for 6 days, or take one-third of the interest for 60 days and deduct one-half of the interest for 6 days, or from three times the interest for 6 days deduct one-sixth of the interest for 6 days.

For 18 days find 3 times the interest for 6 days.

For 19 days add one-sixth of the interest for 6 days to the interest for 18 days, or deduct one-sixth of the interest for 6 days from one-third of the interest for 60 days.

For 20 days take one-third of the interest for 60 days.

6. What is the interest on $364.50 for 5 days, for 8 days, for 10 days, for 13 days, for 16 days, for 19 days?

7. What is the interest on $728.70 for 7 days, for 9 days, for 11 days, for 14 days, for 15 days, for 17 days, for 20 days?

8. If the amounts called for in problems 6 and 7 had been loaned on notes with interest at 6%, what sums would be necessary to pay each note plus interest at maturity?

Observe that different aliquot parts methods are suggested in the solution of the above problems. In some instances several others could be suggested. The teacher and student should endeavor to ascertain the particular method that may be used to the best advantage in the solution of any problem.

Purpose and Method: Beginning with lesson 60 most interesting information and problems are provided which, if thoroughly worked over and understood, will lay a basis for an understanding of the important subjects of interest and discount and their calculations that will be invaluable. The aliquot part method, or the "6–60 day rule," as it is frequently called, is one that has been in use for many years, but our explanations for using the method we have not seen elsewhere. They are extremely simple and can be easily understood by very immature students.

Using the diagram illustrated in lesson 5, drills in rapid calculations of all kinds should be continued daily. Only a few of the many ways in which this diagram can be used have been suggested. Teacher and pupils should cooperate in devising additional drills. It is again suggested that this text is intended to require the student to do the thinking and to develop his judgment in the rapid and accurate handling of figures. There is no secret process for acquiring special skill in calculating. It is a matter of intelligent and continuous practice.

LESSON 62

Finding Aliquot Parts of the Interest for 6 or 60 Days at 6% for any Other Number of Days on Any Amount

1. State the method for finding the interest on any amount for any of the different numbers of days between 20 and 45; i.e., for 21, 22, 23, 24 days, etc., as instructed in the paragraph "In like manner," lesson 61.

2. What is the interest at 6% on $256.75 for 24 days, for 26 days, for 32 days, for 21 days, for 38 days, for 40 days, for 22 days, for 28 days?

3. Find the interest at 6% on $37.50 for 23 days, for 27 days, for 25 days, for 21 days, for 29 days.

4. Find the interest on $44.50 for 33 days, for 36 days, for 39 days, for 37 days, for 35 days, for 34 days.

5. Explain the difference between interest and discount. (See lesson 60.)

6. A borrowed $275 from B for 60 days for which he gave his note bearing 6% interest. At maturity of the note what interest had accrued on the note and what amount did A have to pay B in full for what he owed on the note? What would have been the interest and the total amount paid if the face of the note had been $450?

7. If in the previous problem B had discounted A's note for $275 for 60 days at 6%, what would have been the amount of the discount and of the proceeds; i.e., how much of the $275 would A have received at the time the note was discounted? What amount would A have had to pay B when the note became due? Wherein is this amount different from what he would have paid in problem 6?

8. Answer the following questions:

(*a*) What additional element is involved in calculating interest and discount on promissory notes that is not involved in finding the discount on bills, etc.? (*b*) When does interest begin to accrue and for how long? (*c*) For what time is discount calculated?

Purpose and Method: Developing the method of finding the interest for different numbers of days as suggested in the paragraph beginning "In like manner," is most important because it makes the student his own rule-maker and it clearly develops in his mind the "aliquot part" principle of arithmetical treatment which is involved, and which can be made valuable in developing the "arithmetical sense" previously referred to. The statements of how to find the interest for different numbers of days may be oral or written.

LESSON 63

Finding Aliquot Parts of the Interest for 6 or 60 Days at 6% for any Other Number of Days on Any Amount

1. State the method for finding the interest on any amount for any of the different numbers of days between 45 days and 60 days, as required in lesson 62.

2. What is the interest at 6% on $448.12 for 45 days, for 50 days, for 55 days, for 58 days, for 48 days, for 66 days?

3. What is the interest at 6% on $94.75 for 47 days, for 51 days, for 52 days, for 54 days, for 56 days, for 57 days?

4. Find the interest at 6% on $1226.80 for the other numbers of days between 45 and 60 not included in problems 2 and 3.

5. If notes were given for the different numbers of days between 45 and 60 for $1226.80, with interest at 6%, what amount would be necessary to pay each note at maturity?

6. State the total amount of interest that would have accrued at maturity if notes had been issued for the amounts stated in problems 2 and 3 for the periods of time as stated in the problems.

7. List as notes payable the notes called for in problem 2, as shown in illustration 30, using the names of fellow students or others you know as payees.

Purpose and Method: This lesson is a continuation of the preceding lesson in developing the student's ability to ascertain the methods of finding the interest or discount for different numbers of days, with the addition of a review of listing notes payable preparatory to preparing statements or accounts of the cost of interest and discount and the income derived from such sources..

LESSON 64

Finding Aliquot Parts of the Interest for 6 to 60 Days at 6% for any Other Number of Days on Any Amount

Interest for any number of days greater than 60 is found by taking multiples of 6 or 60 days and adding or subtracting as the case may be. For instance: (a) The interest for 66 days is the interest for 60 days plus the interest for 6 days; (b) the interest for 67 days is the interest for 60 days, plus the interest for 6 days, plus one-sixth the interest for 6 days; (c) the interest for 65 days is the interest for 6 days, minus the interest for 1 day (one-sixth of the interest for 6 days), plus the interest for 60 days; (d) the interest for 70 days is the interest for 60 days, plus one-sixth of itself; (e) the interest for 63 days is the interest

for 60 days, plus one-half the interest for 6 days; (f) the interest for 80 days is the interest for 60 days, plus one-third of the interest for 60 days; etc.

1. Find the interest on \$58.49 for 61, 62, 63, 64, 65, 66, 67, 68, and 69 days.

2. Find the interest on \$286.50 for 71, 72, 73, 74, 75, 76, 77, 78, 79, and 80 days.

3. Find the interest on \$16.80 for the different numbers of days between 80 and 90.

4. If notes were discounted for the amounts in problems 1, 2, and 3 for the different numbers of days stated, what would have been the total amount of discount taken by the bank, and what would have been the total proceeds of the notes discounted?

Purpose and Method: By this time the student should have no difficulty in calculating either the interest or the discount on any amount for the time stated. Some drill in properly placing the decimal point has doubtless been necessary. That, however, has been left for the attention of the teacher as it is assumed that the student has previously had some training in percentage and decimals.

LESSON 65

Finding the Interest or Discount on Any Amount When the Rate is Other than 6%

The aliquot parts method of calculating interest is not confined to finding the interest for numbers of days other than 6 and 60 but it is extended to include rates of interest other than 6%. For instance, to find the interest on any amount at 7%, which is 1% greater than 6%, one-sixth of the interest at 6% is added; at 5% one-sixth is deducted; at 6½% one-twelfth is added; at 5½% one-twelfth is deducted; at 4% one-third is deducted; at 4½% one-third is deducted and one-twelfth is added; at 3% one-half is deducted; at 7½% one-sixth and one-twelfth is added; at 8% one-third is added; etc.

1. What is the interest on \$500 for 30 days at 6%; at 7%; at 5%; at 3%; at 8%?

2. What is the interest or discount on \$45 for 45 days at 6%; at 5½%; at 6½%; at 7½%; at 3½%?

Read paragraph 6, lesson 60.

Thus, a note for \$600 dated April 10 at 60 days would mature June 10. If discounted May 1, the unexpired time would be the number of days from that date to and including June 10, or 40 days, and the discount would be calculated on the \$600 for 40 days.

PROBLEMS

3. If a note for $467.75 dated October 5 at 60 days was discounted November 14 at 6%, what was the amount of the discount and proceeds?

4. If it was discounted at 5% what were the discount and proceeds?

LESSON 66

FINDING THE DISCOUNT AND PROCEEDS ON NOTES FOR THE UNEXPIRED TIME

1. The following notes were discounted at bank for the unexpired time and at the rate of discount stated.

NOTE: The date of issue and date of maturity, as well as the names of the parties to the following notes, are omitted to save the time of the student in finding the unexpired time.

Amount	*Unexpired time*	*Rate*
$525.00	69 days	6 %
1324.62	93 days	7 %
129.82	48 days	5½%
714.75	56 days	4½%
1789.28	34 days	7 %
1245.86	77 days	3½%

What was the total amount of discount and the total proceeds of these notes?

The total amount of discount represents the *total cost* of having these notes discounted at the bank, and this amount represents the bank's profit for discounting them. It is a *cost* to the one for whom they were discounted. It is an *income* to the bank.

2. What is the discount and proceeds of each of the following notes?

Amount	*Unexpired time*	*Rate*
$916.78	87 days	7½%
437.62	22 days	4 %
1189.28	28 days	4½%
1963.00	39 days	6 %
7246.54	27 days	5 %

Purpose and Method: They are so clearly defined in the lesson that comment is unnecessary.

LESSON 67

FINDING THE DISCOUNT AND PROCEEDS ON NOTES FOR THE UNEXPIRED TIME

1. The following notes received were discounted on the dates given. What was the discount for the unexpired time of each note and the proceeds after the discount was deducted?

	Date	*Maker*	*Time*	*Amount*	*Date of Discount*
(a)	Mar. 12	J. B. Ross	90 days	$1218.40	April 12
(b)	April 21	Bates & Co.	60 days	967.25	May 2
(c)	June 26	Alex. Carter	90 days	734.28	July 6
(d)	Aug. 3	Bell & Bell	3 months	329.60	Sept. 16
(e)	Dec. 10	H. C. Jones	30 days	1476.34	Dec. 24

The above notes were discounted at the following rates: (a) 6%; (b) 7%; (c) 5½%; (d) 4½%; (e) 8%.

Proceed as follows:

(a) List these notes as shown in illustration 28.

(b) Prepare a completed statement showing the date and amount of the discounts for each note as shown in the following illustration:

ILLUSTRATION 38

Discounts on Notes Receivable

19		(Cost)											
Apr	12	$1218.40	59 ds.	6%			11	98					
May	2	967.25	49 ds.	7%			9	22					

(c) What was the total amount of the notes discounted?

(d) What were the proceeds of each note discounted?

(e) What was the total discount deducted by the bank as shown by the discount statement?

(f) If the proceeds of each note was deposited at the time of discount, how much was added to the amount on deposit in bank?

(g) If these notes were drawn with interest, what would be the total amount including the face of the note and the interest?

(h) What would have been the total amount of cash received in payment for the notes including the interest?

2. Supposing all of the notes in problem 1 had been discounted at 6%, what would have been the total discount and the total proceeds? What would have been the total discount and proceeds if discounted at 5½%.

Purpose and Method: In this lesson the finding of the unexpired time and the notes receivable book and account are reviewed. The teacher may assign such part or items of the above problems as he may see fit if the student does not have sufficient time to work all of the problems as presented. This applies also to lesson 68.

LESSON 68

Finding the Cost of and Income Derived from Interest Bearing and Discounted Notes

1. The following notes in our favor were paid on maturity dates mentioned with interest at the rates of percent named:

Date of Maturity	*Amount*	*Rate*	*Unexpired Time*
May 4	$2647.50	7 %	4 months

Note: Four months is counted as 120 days.

May 8	3250	6 %	110 days
May 9	756.25	4½%	76 days
May 16	164.25	5 %	50 days
May 18	1750.92	4 %	49 days
May 24	314.27	7½%	63 days

The following interest bearing notes which we issued were paid during the same month with interest for the time and at the rate percent given.

May 2	678.92	3 %	78 days
May 6	849.36	8 %	99 days
May 9	6329.56	5½%	102 days
May 16	1640.73	4 %	43 days
May 25	2227.57	5½%	108 days
May 30	3641.90	6½%	67 days

Interest on notes in our favor represents *income*, while interest on notes issued by us in favor of others represents *cost*.

Prepare and complete a statement like the following illustration:

Illustration 39

Interest

(Cost)					(Income)				
19					19				
May	2	$678.92 78 di 3%		4 41	May	11	$2647.50 4 mo. 7%		60 85
	6	849.36 99 ds 8%		18 69		8	3250, 110 d's 6%		59 58

Answer the following questions:

(a). What was the total cost of interest paid during the month?

(b) What was the total income from interest for the month?

(c) Which was the larger,—the cost of interest paid others or the income from interest paid us?

Purpose and Method: The purpose is to familiarize the student not only with the method of finding the amount of interest accrued on different amounts for different periods of time at different rates of interest, but also to suggest the method of arranging these interest items in the form indicated in the ordinary ledger form arrangement of these items as they would appear in a formal set of books.

LESSON 69

Finding the Cost of Having Notes Discounted

Notes are discounted to secure the use of the money for the time that is to pass before they become due and payable. As has already been explained, the party discounting such notes makes a charge based upon the time and the rate of discount. *This charge is always a cost to the one who receives the use of the money.* Therefore,

Interest and discount are always costs when the use of the money is received.

Interest and discount are always incomes when the use of the money is given. See Lesson 60.

Banks lend money on several classes of notes; (a) notes received from those who owe the parties discounting them, which are known as *commercial* or *trade* notes; (b) those issued by the borrower to the party discounting them. Such notes are secured either by endorsement of a third party or by collateral, and they are known as loan notes.

1. The following notes were discounted by a bank for a firm during the month of June. Find the amount of the discount and the proceeds of each note, and prepare an itemized statement of the discounts similar to illustration 38.

Date of Disct.	*Amount*	*Unexpired Time*	*Rate*
June 5	$5750.25	69 days	$6\frac{1}{2}\%$
June 10	10257.75	51 days	$4\frac{1}{2}\%$
June 15	2725.60	31 days	$5\frac{1}{2}\%$
June 27	114.62	68 days	$5\frac{3}{4}\%$
June 30	1009.03	57 days	$5\ \%$
June 30	1462.90	88 days	$5\frac{1}{4}\%$

2. Find the discount and the proceeds on the following notes discounted in July, and prepare a statement showing the cost of the discount as instructed in problem 1.

Date of Disct.	*Amount*	*Unexpired Time*	*Rate*
July 3	$9346.75	84 days	5¼%
July 7	3442.27	77 days	5½%
July 10	13496.56	73 days	6 %
July 12	36.47	17 days	6 %
July 20	7444.46	44 days	5¾%
July 24	1919.19	19 days	3½%
July 24	8118.14	88 days	5 %

Purpose and Method: This lesson further develops interest and discount accounts.

LESSON 70

Drafts and Acceptances

In previous lessons, beginning with lesson 41, notes and their forms, the parties thereto, and the purposes for which they are used, have been discussed. Such notes were described as "promissory notes" because they contain a "written promise to pay." (Read and study instruction matter in lesson 41.)

A promissory note is an unconditional promise on the part of the maker who signs it to the payee in whose favor it is made. Literally stated, the maker says, "I will pay you." It is the promise of the one who *owes* to the one who *is owed.*

There is another kind of commercial paper that performs practically the same function in the transaction of business, *but it is different in form.* It is the *written request* of one *who is owed* to one *who owes him* to pay a certain sum sum of money, to himself or to some other one whom he designates. This form of commercial paper is known as a *draft.* The one who makes the request is known as the *drawer* of the draft. The party to whom the request is made is known as the *drawee,* while the party to whom the money is to be paid is the *payee.* The payee and the drawer may be the same party. Therefore:

A Draft is the written request of one party, the *drawer,* to a second party, the *drawee,* to pay to some designated party, the *payee,* a specified sum of money.

Drawing a draft presupposes that the drawee owes the drawer the amount stated in the draft which will be due at the time specified in the draft.

If the drawee accepts the draft, he then becomes responsible for its payment *the same as if he had given a promissory note to the drawer.* That is to say, when the drawee of a draft accepts it he assumes the same responsibility that the maker of a promissory note assumes when he signs it.

As to time of payment, drafts are drawn in three ways; (*a*) at sight; (*b*) at a stated number of days after sight, which means after the date on which the draft is accepted and (*c*) at a stated number of days after date, which means the date of the draft without reference to the date on which it is presented for acceptance. Sight drafts are due *when presented* and therefore do not require an acceptance.

Accepting a draft is agreeing to pay it when due by writing the word "Accepted" across the face, followed by the date and the signature of the drawee, who thus becomes the "acceptor" and the draft is known therefore as an "acceptance." The acceptor is then responsible in the same manner as the maker of a note.

A draft drawn at sight is due and payable when presented to the drawee.

A draft drawn "after sight" begins to mature *from the date of acceptance,* and when drawn after date it begins to mature *from the date the draft was drawn* without regard to the date of acceptance, just as a note begins to mature from the date on which it is made.

Drafts are transferable by endorsement the same as notes when they contain the words "or order" or "or bearer."

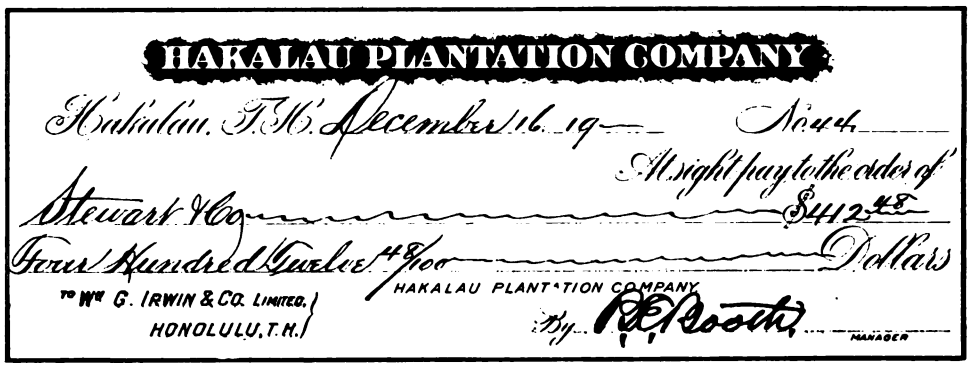
When a draft is drawn in which the drawer is also the payee, it is usually sent directly to the drawee for payment or for acceptance. If it is a collection sight draft it is usually presented through bank.

If the drawer names some other one than himself as the payee, it is usually sent by the drawer to the payee who presents it to the drawee for payment and acceptance, or if the drawee is located nearer to the drawer than to the payee the draft may be presented to the drawee for acceptance by the drawer.

The following illustrations show different forms of drafts.

Sight Draft

Illustration 40,


HAKALAU PLANTATION COMPANY

Hakalau, T. H. December 16 19— No. 44

At sight pay to the order of

Stewart & Co. $412.45

Four Hundred Twelve 45/100 Dollars

To Wm G. Irwin & Co. Limited, Honolulu, T. H.

HAKALAU PLANTATION COMPANY

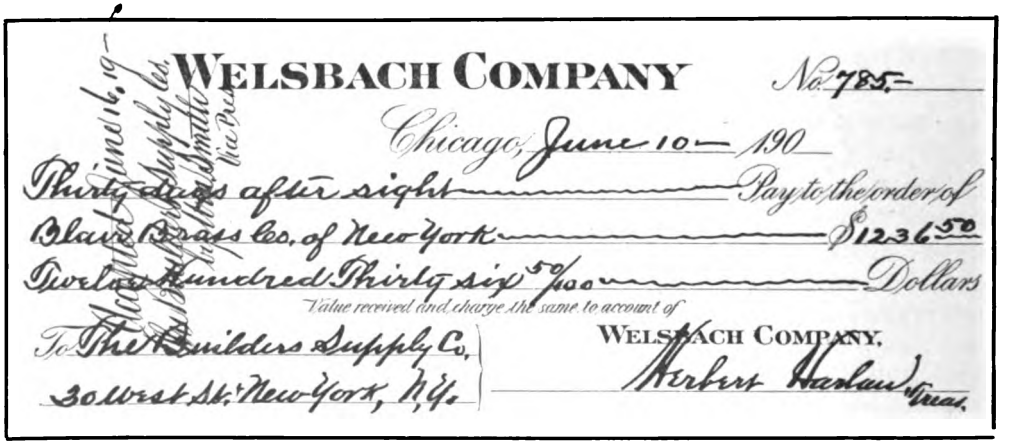
By R. E. Booth Manager

In this draft Hakalau Plantation Co. is the *drawer*, Wm. G. Irwin & Co., Ltd. is the *drawee*, and Stewart & Co. is the *payee*. This is known as a "three party draft" because the drawer and the payee are different persons.

A check is a sight draft of which the bank is the drawee. See lesson 39.

Draft Drawn "After Sight"

Illustration 41


WELSBACH COMPANY No. 785

Chicago, June 10— 190

Thirty days after sight Pay to the order of

Blair Brass Co. of New York $1236.50

Twelve Hundred Thirty six 50/100 Dollars

Value received and charge the same to account of

To The Builders Supply Co. 30 West St. New York, N.Y.

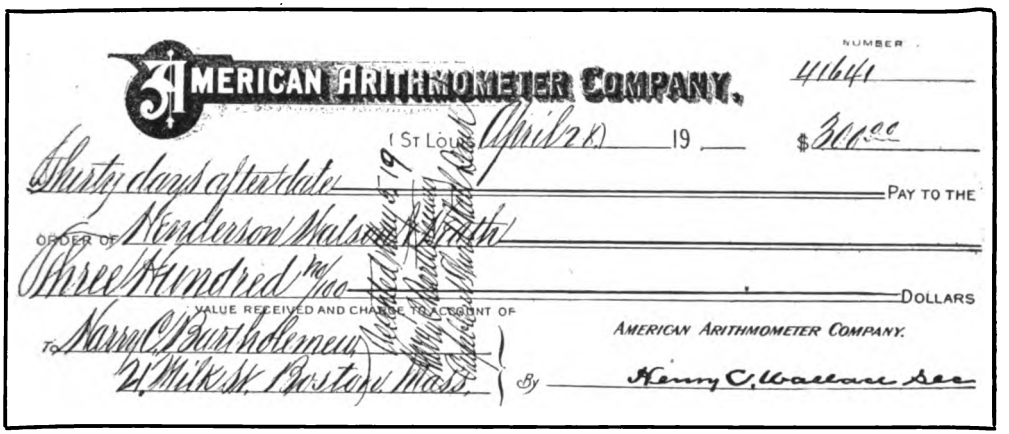
WELSBACH COMPANY

Herbert Harland Treas.

This is also a three party draft. Note that while the date of the draft is June 10, it was not accepted until June 16, and consequently the draft begins to mature from the date of the acceptance, and the due date of the draft is found by counting forward the stated number of days from the date of the acceptance.

Draft Drawn "After Date"

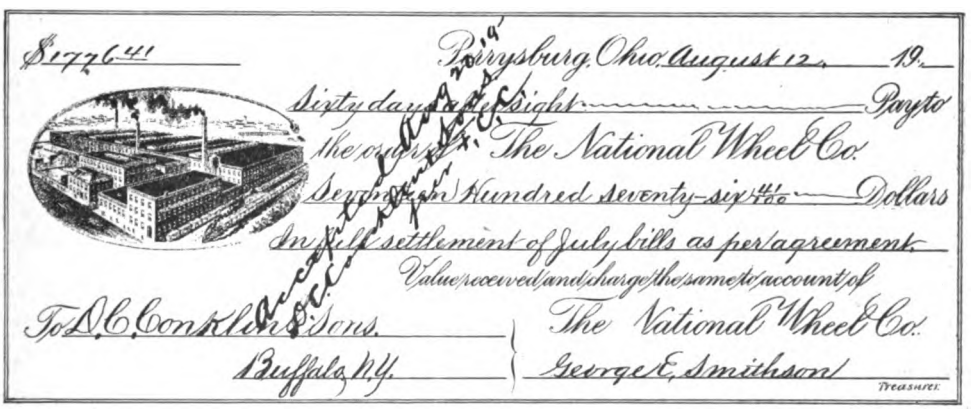
Illustration 42



This is also a three party draft, but although it is accepted May 5, it begins to mature *from the date on which it was drawn*, April 28, and matures the stated number of days counting forward from that date.

Two Party "After Sight" Draft

Illustration 43


$1776.41
Perrysburg Ohio August 12 19
Sixty days after sight Pay to
The order of The National Wheel Co.
Seventeen Hundred seventy-six 41/100 Dollars
In full settlement of July bills as per agreement
Value received and charge the same to account of
To D.C. Conklin & Sons
Buffalo N.Y.
The National Wheel Co.
George E. Smithson
Treasurer

This draft does not differ in form from the "after sight" draft shown in illustration 41, except that the drawer and the payee is the same party. When the drawee accepted this draft it was exactly the same as if he had given his promissory note to the drawer for the same amount and maturing at the same time. An "after date" draft could be drawn in the same manner.

"Collection" Sight Draft

Illustration 44

NATIONAL CANDY COMPANY No 200

CHICAGO FACTORY
118-130 E. SUPERIOR STREET
CHICAGO, October 9, 19—

At sight pay to the order of Ourselves for collection, $76.21

Seventy-six 21/100 Dollars.

Value received and charge to account of
To Andrew D. Brampler
Pittsburg Pa. 97 Wood St.

NO PROTEST. Do not hold. Return Draft or proceed promptly.

NATIONAL CANDY COMPANY
By Grant Harbison, Cashier

This form of draft is used principally for collecting amounts that are due or overdue. Observe that in the draft illustrated it is made payable to a bank, presumably the bank at which the drawer keeps his account. It could, however, have been drawn in favor of the drawer and endorsed by him to his bank, which would give it the authority to collect the draft.

Note that in one of the accepted drafts the drawee has designated the bank at which it is payable, which is presumably his own bank. In another, the place of payment is not designated, which would require the draft to be presented for payment at the place of business of the drawee during usual business hours.

Exercises in Writing Drafts

1. Draw a draft at sight, dated August 15, for $256.50, of which you are the drawer, Adam Ness is the drawee, and John Milton is the payee. See illustration 40.

2. Draw two similar drafts for which your teacher will supply you with the dates, the amounts, and the names of the parties.

Purpose and Method: This lesson should be carefully studied and the peculiarities of the different forms of drafts should be carefully pointed out. The students should be quizzed until they thoroughly understand the various items of information given.

If the *relations* of the different parties to a draft are carefully considered so that each student will know exactly *who owes* and *who is owed* before the draft is written, and the changes which will take place in the relations of the parties when it is drawn and when it is paid or accepted, and also, if a time draft, when it is finally paid, it will remove much of the difficulty which students sometimes encounter in understanding drafts. In the subsequent lessons treating of drafts, the similarity between the obligations assumed by the maker of a note and the acceptor of a draft should be emphasized.

Sight drafts and acceptances are becoming much more largely used than ever before. Their use is strongly advocated by many of the leading banks of the country. It is for this reason that considerable attention is given to them in this work.

LESSON 71

Exercises in Writing Drafts and Acceptances

1. Write a draft dated Cincinnati, Ohio, October 7, 19—, at 30 days sight, for $146.75, of which William Myers is the payee, David Jameson, New Castle, Pa., the drawee, and A. G. Batchelder, the drawer. Then write across the face of the draft, "Accepted October 11, 19—, Payable at the Citizens National Bank," and write the name of the drawee underneath, as shown in illustration 41.

2. Write a draft dated Portland, Me., February 24, 19—, at 60 days after date, drawn by Richard Kennerdell (the drawer) in favor of Samuel Miles (the payee) on F. G. Webb (the drawee), Brooklyn, N. Y., for $445. Then write an acceptance across the face of the draft dated March 1, as shown in illustration 43. Note that no place of payment is designated in the acceptance. It should therefore be presented for payment at the drawee's place of business in Brooklyn on the day it matures. When does this draft begin to mature, on February 24 or March 1?

Note: In accepting drafts drawn "after date" it is immaterial whether the date of the acceptance is included or not. All that is necessary is for the drawee to write "Accepted" across the face of the draft and sign his name. Usually, however, the date of the acceptance is included as it is sometimes useful in fixing the date on which the draft was entered in the books of the acceptor.

3. T. G. Young owes F. E. Burns $200 for which Burns draws a draft in favor of himself, dated June 18, at 1 month after date, which he sends to Young for acceptance on June 21. Mr. Young accepts the draft on June 24 and returns it to Burns. This is a two party draft similar to the one shown in illustration 43. Write the draft and the acceptance.

4. Hooper Brothers sold goods to B. C. Pelton for $765.75, which is overdue. They made a draft on Pelton at sight for the amount, drawn in favor of the Northern National Bank where they transact their banking business, and left the draft at the bank for collection. Write the draft. It is similar to the draft shown in illustration 44.

Purpose and Method: The drafts to be written should be thoroughly analyzed. They are intended primarily to fix the form of the different kinds of drafts in the student's mind. The teacher should dictate other drafts to be written using different names and amounts, referring to the illustration showing the particular kind of draft he desires to have written, If these common forms of drafts cannot be clearly fixed in the student's mind in one recitationt more time should be devoted to them until they are understood. Acceptances, their differenr forms, and what they mean should be carefully explained by the teacher, as well as any othe. points which are not fully understood by the student.

It should be understood that this, like many other lessons, is intended to be suggestive rather than to provide all the drill exercises that may be needed. The teacher is expected to use his judgment as to the amount of repetition he thinks necessary to firmly fix the subject under consideration in the mind of the student.

LESSON 72

A Comparison of Drafts with Notes

In lesson 70 the different kinds of drafts, particularly as to time of payment, were described and some comparisons were made with promissory notes. There are some differences, however, that should be carefully observed.

A sight draft is not a written promise to pay on the part of the drawee. It is merely a request made of him to pay what he owes. He is under no obligation beyond his original indebtedness. He is expected to pay the draft when presented, which will cancel what he owes or at least such part of it as is represented in the amount of the draft. If he does not pay the draft, he simply refuses to pay what he owes when it is due.

Neither is an "after sight" or an "after date" draft a written promise to pay on the part of the drawee *before its acceptance.* It is no more binding upon him than a sight draft or his original indebtedness. *After he has accepted the draft,* however, the drawee is bound for its payment at maturity exactly as the maker of a note is bound for its payment at maturity.

A better understanding of the differences and similarities of notes and drafts will be had if it is remembered that a note always originates with the maker. His promise to pay is a voluntary act even though it may have been requested by the payee. He writes, signs, and issues the note. On the other hand, a draft originates with the drawer. It is a *request to pay* (in a sight draft) or *to promise to pay* (in a time draft) upon presentation of the draft to the drawee. In the case of time drafts the obligation to pay is not created until after acceptance. Hence, it is not until after acceptance that the obligation of the drawee of a draft is similar to the obligation of the maker of a note.

In order to make a comparison between drafts and notes perfectly clear, study the following draft and note and the comments relating thereto; then write a copy of each.

Illustration 45

Draft

$765.27 *Pittsburgh, Pa., August 23, 19 .*

Thirty days after sight pay to the order of ourselves Seven Hundred Sixty-five 27/100.....Dollars

For value received and charge to our account.

To John B. Harris,
1920 Arch St.,
Philadelphia, Pa.

William Walker and Sons.

Comment. This draft was accepted August 26 by the drawee. Prior to this acceptance, as has been stated in the preceding paragraphs, John B. Harris was in no way bound for the payment of this draft and the payee had no claim upon him beyond what they had before the draft was drawn. When John B. Harris wrote his acceptance on the draft, he then passed his written promise to pay to William Walker and Sons exactly as though he had issued his note to them. The following is the note he could have issued which would have been the equivalent of his acceptance of the draft:

ILLUSTRATION 46

NOTE

$765.27 *Philadelphia, Pa., August 26, 19—.*

Thirty days after date I promise to pay to the order of William Walker and Sons Seven Hundred Sixty-five 27/100.....Dollars For value received.

John B. Harris.

If, however, William Walker and Sons had made the draft payable to a third party as the payee, there would have been some change in the obligation assumed by the drawee, John B. Harris. If the payee had been Wilson and Company, the drawee, John B. Harris, would have obligated himself to pay the amount of the draft at maturity to Wilson and Company instead of to William Walker and Sons, although his original indebtedness to William Walker and Sons would not be finally canceled until the draft was paid, and until it was paid William Walker and Sons would in turn be responsible to Wilson and Company for the payment of the draft as *first endorser.* In other words, William Walker and Sons would be in exactly the same position towards Wilson and Company as they would have been had John B. Harris given them the note shown in illustration 46, and William Walker and Sons had transferred it by endorsement to Wilson and Company.

An endorsement consists of writing the name of the payee across a note or draft or other negotiable paper when it is transferred to another party. There are several kinds of endorsements. The most common are; (a) the simple or blank endorsement, which consists of the name of the payee written across the back of the paper to be transferred; and (b) the special endorsement which includes above the signature of the payee the words "Pay to the order of;" followed by the name of the party to whom the paper is to be transferred.

There are other forms of endorsement which your teacher will explain to you if it is thought advisable.

LESSON 73

Some Examples in Writing Drafts and Notes for the Purpose of Making Comparisons of the Relations Established Between the Parties Thereto

Write the draft and then the equivalent note that would have passed in the following instance:

On January 2 F. M. Palmer, San Francisco, Cal., owed M. M. Williar of Chicago, Ill., $245.75 which was due in 60 days. Williar on the date named made a draft on Palmer in his own favor for the amount of his indebtedness and forwarded the draft to Palmer for acceptance. On January 6 the draft was accepted by Palmer and returned to Williar.

Proceed as follows: (*a*) Write the draft; (*b*) write Palmer's acceptance; (*c*) determine the due date of the draft; (*d*) write the note that Palmer could have issued to Williar that would have been the equivalent of the acceptance of the draft. (*e*) If Palmer owed Williar $450 on January 2, how much of the original indebtedness was still owing to Williar?

Suppose that Williar owed Carle and Co. of Oakland, Cal., $245.75, and that he had drawn the draft on Palmer in favor of Carle and Co. instead of himself, and that Palmer had accepted and forwarded the acceptance to Carle and Co. (*a*) Write the draft. (*b*) Write Palmer's acceptance. (*c*) Whose indebtedness to Williar for the amount of the acceptance was canceled? (*d*) Whose indebtedness to Carle and Co. for the same amount was canceled? (*e*) To whom was Palmer obligated to pay the amount of the draft when due. (*f*) To whom was his indebtedness for the amount of the draft canceled? (*g*) If Palmer failed to pay his acceptance when due, who would be held for payment as the first endorser? (*g*) If Palmer failed to pay the draft and the first endorser (Williar) did pay it, would Palmer be relieved from his original indebtedness? (*i*) Would he owe the drawer or the payee of the draft? (*j*) Write a note that Palmer could have issued to Williar that would have been the equivalent of the acceptance of Williar's draft in his own favor. (*k*) If Palmer had sent such a note and Williar had transferred it by endorsement to Carle and Co., would the note have performed the same service to the three parties that the draft performed? (*l*) Give reasons why it was preferable to use a draft instead of a note.

Purpose and Method: In this comparison of drafts with notes it is intended to make use of the important principle that the mind reaches its conclusions by making comparisons of that which is known with that which is new. If the lessons on promissory notes were thoroughly understood by the student, we have the element of what is known with which to make the comparison between notes and drafts. The questions asked should be thoroughly analyzed by the teacher and class, always giving prominence to the obligations existing between those who owe and who are owed. This lesson the author considers of especial importance and value.

LESSON 74

Some Exercises in Writing Drafts and Notes, Calculating Interest Discounts, Etc.

1. J. W. Brown lives in New York. H. S. Boone lives in Chicago. Maurice Butler lives in Chicago. Boone owes Brown $600. Brown owes Butler $450. On February 4 Brown makes a draft at "sixty days after sight" on Boone in favor of Butler for the amount he owes him and forwards it to Butler to present to Boone for acceptance. On February 8 Butler presented the draft and it was accepted by Boone. On February 11 Butler had the draft discounted at his bank, receiving credit for the proceeds. The rate of discount was 6%.

Proceed as follows: (a) Write the draft. (*b*) Write Boone's acceptance. (*c*) What was the balance still owed by Boone to Brown? (*d*) Was Brown's indebtedness to Butler canceled? (*e*) What was the amount of the discount on the acceptance, and what were the proceeds placed to Butler's credit. (*f*) If Boone should fail to pay his acceptance when due, who would have to pay the bank the amount of the draft as the first endorser? (*g*) If Butler lifted the draft at bank and could not collect from Boone, to whom would he look for payment? (*h*) If instead of making a draft on him, Brown had asked Boone to forward to him his note at 60 days, dated on the same day that the draft was accepted, write the note Boone would have written. (*i*) If Brown had desired to transfer this note to Butler, write his special endorsement across the back of the note. (*j*) If Butler had held the accepted draft until it was due, write the check Boone would have issued to Butler. (See lesson 39.)

After Boone paid the acceptance, it would pass to him and he should hold it to show that it had been paid.

2. Chas. Archer of Boston, Mass. sold a bill of goods to William Cullen of Springfield, Mass., March 1, $75.50, which was due April 30. On March 16 Archer made a draft "*April 30 after date*" on Cullen for the amount of the bill in favor of Henry Anderson of Erie, Pa. The draft was accepted by Cullen and forwarded to Anderson. Write the draft.

Note: This is a common form of draft drawn to fall due on the due dates of bills purchased.

If Anderson's bank discounted this acceptance on March 23, what was the amount of the discount and the proceeds?

3. On April 2 Chas. Archer of Boston sold a bill of goods to R. E. Scott of Salem, Mass. at 10 days for $116.12. On the due date of the bill Archer drew a draft at sight in favor of Geo. P. Lord of Salem for the amount of the bill and forwarded it to Lord in part payment of a bill he owed Lord. Lord presented the draft to Scott who paid it in cash. Write the draft.

(*a*) This draft cancels Scott's indebtedness to whom? (*b*) If Archer owed Lord $225, what was the remainder still owed by Archer to Lord? (*c*) Archer concluded to pay this balance by his note at 30 days. Write the note dating it April 15. (*d*) If Lord's bank discounted his note on April 16 at 5½%, what was the discount and proceeds?

Purpose and Method: The problems above are examples of many others that may be constructed by the teacher. It is always well to state the conditions that brought about the use of the drafts and notes. The purpose is to acquaint the student with every phase common to the settlement by draft or note of bills or other amounts owed.

LESSON 75

Expense Items

In every business there are various expenses necessary in carrying on the business, such as rent, light, heat, taxes, insurance, salaries of office help, office supplies, stationery, postage, telephone and telegram charges, etc. Such expenses are part of the *cost* of running the business. Their cost differs from cost of merchandise, since they represent materials, uses, and services that are *used up* in conducting the business.

It is very important to keep a record of such expenses since they must be deducted from the gross trading profit as shown by the trading statement before the net profit of the business can be ascertained. (See illustration 13.)

Sometimes the expenses of a business are divided under separate headings, such as selling expenses, administrative expenses, general expenses, etc., as shown in the illustration above referred to. Iu other cases they are listed under the single heading of "Expenses."

Expense items are usually made a part of the routine record of the business and appear in more or less detail in ledger statements or accounts.

1. The following are the expenses of Chas. Peabody during January in conducting a retail grocery business:

Jan. 2, Rent $75; Jan. 8, Coal $17.50; Jan. 15, Gas $6.75; Jan. 17, Electric light $8.20; Jan. 23, Insurance premiums paid $48; Jan. 26, Delivery charges $31.75; Jan. 29, Office stationery and postage, $3.60; Jan. 31, Clerk hire $156.

What were his expenses for the month? Prepare a statement as shown in illustration 47.

ILLUSTRATION 47

Expense

19 Jan.	2	Rent	75	
	8	Coal	17	50
	15	Gas	6	75
	17	Elec. light	8	20
	23	Ins. premiums	48	
	26	Delivery chgs	31	75
	29	Office sta. & postage	9	60
	31	Clerk hire	156	80
			344	

Selling expenses are those incurred in connection with the selling department of a business. *Administrative* expenses are those incurred in the general management of a business, such as salaries of officers and managers and their traveling expenses, and such other expenses as the cost of office supplies, postage, stationery, etc.

2. A wholesale house had selling expenses as follows for the month of February:

Feb. 1, Salesmen's salaries $480; Feb. 5, Traveling expenses $213; Feb. 9, Cost of sample goods $4.65; Feb. 12, Wrapping materials $24.75; Feb. 17, Wrappers' wages $128; Feb. 20, Advertising bills $325.

What were the total selling expenses for the month? Prepare a statement similar to illustration 47 under the head of "Selling Expense."

3. The administration expenses of a foundry and machine shop for the month of March were as follows:

Mar. 5, Managers' salaries $850; Mar. 9, Bookkeepers' salaries $220; Mar. 16, Clerks' and stenographers' salaries $316; Mar. 20, telephone and telegram charges $41.75; March 30, Directors' fees $16.

Prepare a statement showing the total administrative expenses for the month under the heading "Administration Expense."

Purpose and Method: A careful study should be made of what is meant by expense items and the student should be carefully quizzed on the explanations and problems given. Note that classified lists of expenses are given under separate headings.

LESSON 76

Expense Items

One of the most important items of expense in connection with conducting various lines of business, such as department stores, is the cost of *delivering goods to customers*. Such expenses are known as *delivery expenses* and they are usually classed under the heading of "Delivery Expense." Cost of repairs on delivery equipment, such as automobiles, horses, wagons, harness, also feed supplies, gasoline, oil, drivers' or chauffeurs' wages, and all other items that enter into the cost of delivering goods are classed under "Delivery Expenses."

1. Campbell & Co.'s delivery expenses for April were as follows:

April 3, Repairs on delivery truck $13.70; April 13, Feed for horses $24.19; April 17, Gasoline $8.12; April 20, Drivers' wages $90; April 24, Bridge and ferry toll $7.20; April 26, Tire repairs $8.50; April 30, Repainting delivery wagon $40.

Prepare a statement showing the costs of the delivery expenses for the month under the heading "Delivery Expense."

An important item in large stores is the continual repairs on counters, showcases, floors, windows, furniture and fixtures that are necessary throughout the building. These are known as *repair and renewal expenses*. Problem 2 following is an illustration of some of the items of this kind.

2. May 2, Repairs to storm doors $7.50; May 7, Replacing broken glass in show-case $12; May 10, Repairs on cash carrier $16; May 16, Repairs on furniture $17.75; May 21, Recovering sofa $9.00; May 24, Replacing broken mirror $18; May 28, Repairing typewriter $2.60; May 31, Repainting sign $12.20.

Prepare a statement showing the cost of repairs and renewals for the month under the heading of "Repairs and Renewals."

3. If the gross income for the year was $14560.60 and the expense accounts show the following amounts to be deducted; viz., administrative expense $2100, selling expense $2600, delivery expense $900, repairs and renewals $164, and general expenses, not included in the above such as rent, light, and heat, amounting to $1800, what was the net profit left after these expenses were deducted?

Purpose and Method: This is a continuation of classified expense items. The pupils should be quizzed as to other expense items that they can think of in connection with such lines of business as they may be familiar with.

LESSON 77

TRADE DISCOUNTS

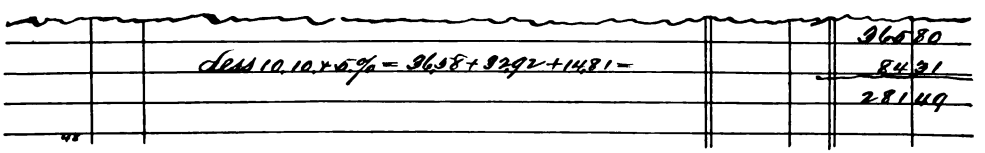
In many lines of business, such as hardware, plumbers' supplies, and drugs, where catalog prices are established considerably higher than the prices for which the goods are finally disposed of to the consumer, the reductions of price are stated in terms of discount. Such discounts are known as *trade discounts*. They are simply arbitrary percentage reductions from the fixed list price of an article and must not be confused with the cash discounts which are allowed for the payment of bills before they are due.

For instance, it is not unusual to see the terms of a bill stated as "30, 20, and 10%, less 2% for cash." This does not mean that 30% plus 20% plus 10% or 60% is deducted from the list price. It does mean, however, that 30% is first deducted from the list price, then 20% is deducted from the price remaining after the 30% is deducted, and an additional 10% is deducted from the price remaining after the 30% and the 20% are deducted. Stated in another way, if the price of an article is listed at \$1.00, 30% or 30¢ is first deducted, leaving a balance of 70¢; then 20% of 70¢ or 14¢ is deducted, leaving a balance of 56¢; and finally 10% of 56¢ or 5.6¢. is deducted, leaving a balance of 50.4¢, which would be the price of the article. If 2% additional for cash is offered the 2% is calculated on the 50.4¢, or 1¢, making the cost of the article less the cash discount 49¢, the fractional part of the cent being omitted in the final calculation.

PROBLEMS

1. A bill of hardware was purchased amounting to \$365.80, terms 10, 10, and 5%. What was the net cost of the bill?

ILLUSTRATION 48



Deducting trade discounts is sometimes tedious. There is no short method that is really brief. The shortest method, however, is to deduct whenever possible by taking aliquot parts. For instance, in the above problem at a glance it is seen that 10% of \$365.80 is \$36.58, which deducted leaves \$329.22. Again, 10% of that amount is \$32.92, leaving a balance of \$296.30. 5%, which is one-half of 10%, that is one-half of \$29.63 or \$14.81, when deducted leaves \$281.49 as the cost after the trade discounts are deducted.

2. Three bills of plumbers' supplies were received, one for $212.84, another for $91.16, and the third for $346. On the first the trade discount was 30%, 10%, and 20%, on the second 40%, 10%, and 5%, and on the third 20%, 15%, and 12%. What was the net amount of each bill?

It should be noted that trade discounts are deducted *by the seller* when the bill is prepared and not by the purchaser. No record is kept of the trade discounts as the customer is charged only with the net amount of the bill.

Students are frequently curious to know why such discounts are deducted. This has been partially explained. There are other reasons some of which are good; for instance, hardware merchants sell their goods largely by catalog. These catalogs are very costly to prepare, and it is necessary that they should contain the prices at which the different items can be purchased. To avoid the expense of reprinting a catalog every time there is a change in the price of any particular article in the catalog, each article cataloged is numbered and all that is necessary is to issue a new "discount list." The desire in some instances that retail purchasers shall not know the wholesale prices nor be able to ascertain them may partly account for the use of trade discounts. The trade discounts in a single establishment may vary widely for different items. In billing such goods, those having the same discount terms are entered on separate bills and they would be so entered with the discounts deducted as shown on the bill, in the sales book of the concern selling the goods.

3. A wholesale grocery received an order for goods falling under four terms of discount. The first bill amounted, at list prices, to $44.40, on which there were trade discounts of 40% and 10%; the second bill amounted to $116.61 on which there were trade discounts of 10%, 5%, and 10%; the third amounted to $14.25 on which there were trade discounts of 15%, 10%, and 5%; and the fourth amounted to $70.10 on which there were trade discounts of 20%, 30%, and 10%. What was the amount of each bill after the trade discounts were deducted, and what was the total amount owed by the purchaser?

Purpose and Method: Calculating trade discounts is a comparatively simple process once it is understood. Additional exercises may be given under the plan suggested if it is found necessary. The other method of finding the various proceeds by calculating the various discounts on the basis of $1.00 and then multiplying the total amount of the bill by the proceeds of $1.00 may be used to advantage as drill exercises if so desired. For instance; a bill of $500 on which the discount is 25%, 20%, and 10%, 25% of 100% equals 25%, leaving a balance of 75%; 20% of 75% is 15%, leaving a balance of 60%; 10% of 60% equals 6%, leaving a balance of 54%. 54% of $500 equals $270, the net amount of the bill.

LESSON 78

WHAT IS *Owned* AND WHAT IS *Owed*

In previous lessons in this book we have referred to such items as cash, notes receivable, and merchandise as property. There are other kinds of property, such as real estate, consisting of lands and houses, also furniture and fixtures, machinery and implements, and in commercial and manufacturing businesses such materials as are used in processes of manufacture, together with all the equipment of manufacturing plants, etc. Debts owed by persons is also another form of property, i.e., property that will be realized when the amounts owed are received, which are called "accounts receivable." All such kinds of property *belonging to* a person *or owned* by him are known as his *resources.*

NOTE: The term "person," as has already been explained, includes individuals, firms, or corporations.

We have also referred to items that are owed to others, such as amounts owing to persons, which are called "accounts payable," and amounts owing on notes payable and other forms of indebtedness. All such items *owed* by a person are known as his *liabilities.*

Therefore:

A resource is *anything of value* belonging to or owned by a person.

A liability is *any debt* owed by a person.

Hence:

The resources of a person consist of anything of value *belonging to or owned by him.* His *total resources* is the *sum* of his resources.

The liabilities of a person consist of *anything owed by him.* His *total liabilities* is the *sum* of his liabilities.

The difference between the total resources and the total liabilities shows the *net resources* or the *net liabilities* of a person, which must equal his *net capital* or *net insolvency* at the time his resources and liabilities are listed.

If the total resources are greater than the total liabilities the difference is the net resources or *net capital;* that is, the amount that would be left over after all debts are paid.

If the total resources are less than the total liabilities the difference is the *net insolvency;* that is, the amount lacking that would be necessary to pay all debts.

The total amount of resources is found by listing under its proper name everything of value belonging to a person, firm, or corporation.

The total amount of liabilities is found by listing under its proper name everything owed by a person, firm, or corporation.

The following is a statement of the resources and liabilities of R. C. Johnson as they were ascertained at the close of the year December 31:

RESOURCES

Cash on hand	$475.90
Inventory of merchandise	3,842.12
Notes receivable on hand	1,216.20
Accounts receivable (consisting of the total amounts owed by persons)	1,425.75

LIABILITIES

Notes payable	$940.50
Accounts payable (consisting of the total amount owed to persons)	1,564.16

What is Mr. Johnson's net capital?

Prepare a statement of Johnson's resources and liabilities as shown in the following illustration.

ILLUSTRATION 49

Statement of Resources & Liabilities December 31, 19 R. C. Johnson

Resources		
Cash on hand	475 90	
Inventory of merchandise	3842 12	
Notes receivable	1216 20	
Accounts receivable	1425 75	
Total resources		6909 97
Liabilities		
Notes payable	940 50	
Accounts payable	1564 16	
Total liabilities		2504 66
Net resources or R. C. Johnsons net capital		4405 31

Purpose and Method: This lesson lays the foundation for an understanding of what is meant by resources and liabilities, net capital, net insolvency, and finally of net profit or net loss. The class should be thoroughly drilled on every paragraph of the lesson. While the definitions of resources and liabilities are very simple, they should be thoroughly understood and carefully prepared.

LESSON 79

Statements of Resources and Liabilities

Before such statements can be prepared, even when ledger accounts are kept, the amounts entered must first be proven by an inventory of what is represented by each heading. For instance, in illustration 49 the actual cash on hand or in bank should be counted to prove that the amount given, $475.90, is correct. The inventory of merchandise, which is a list of the merchandise on hand, is explained in lesson 3. In inventorying merchandise it is the rule to list each item of goods on hand at its cost price, unless its present market price is less than its cost price, when its present market price is taken. To prove the correctness of the amount of notes receivable on hand, all notes and acceptances should be listed and their total amount should agree with the amount entered in the statement of resources. In like manner all of the amounts owed by persons should be listed and the total should agree with the amount entered in the statement.

The liabilities should be proven in the same way. A list of the notes outstanding should prove the correctness of the amount of notes payable entered in the statement, and likewise a list of all the amounts owing to persons should prove the correctness of the item for accounts payable appearing on the statement. This, of course, cannot be done for the problems given in this and following lessons for the reason that we do not have the different items at our disposal.

1. R. W. Dennis reports the following as his resources and liabilities on December 31, 19—. Prepare a statement showing (a) his total resources; (b) his total liabilities; (c) his net resources or net capital.

Mr. Dennis reports his resources to be:

Cash on hand	$7,125.50
Merchandise inventory	16,720.00
Notes receivable on hand	2,126.72
Abraham Carter owes him	225.75
Henry Milligan owes him	728.45
Fred Schmidt owes him	17.21
Harry Gilbert owes him	1,250.00
Warehouse supplies on hand per inventory	321.76
Office supplies on hand per inventory	210.20
Insurance unexpired	156.40
Store building and lot	12,400.00

He reports his liabilities to be:

He owes on notes payable	$7,500.00
He owes to Martin Long	350.75
He owes to Richard Fleming	112.50
He owes to A. C. Reeves	403.90
He owes for clerk hire unpaid	270.00

2. H. M. Grayson & Co. report their resources and liabilities on December 31, 19— to be as follows:

RESOURCES

Cash on hand	$375.62
Merchandise per inventory	9,440.50
Notes receivable on hand	3,845.50
Accounts receivable	4,236.56
Furniture and fixtures	690.00
Teams and wagons	1,125.00

LIABILITIES

Notes payable	1,263.17
Accounts payable	2,928.75
Rent unpaid	300.00
Accrued interest on money borrowed	112.00
Salesmen's salaries unpaid	125.00

Prepare a statement showing (a) the total resources; (b) the total liabilities; and (c) the net resources or net capital of the firm. If the net capital of the firm the preceding January 1 was $10355.60, how much was the capital increased for the year? If this amount represented the net gain for the year and there were two partners each of whom shared equally in the net gain, what was the net gain of each partner?

Purpose and Method: This lesson develops another step towards the solution of partnership settlements, which it is intended to prepare for as well as to fix a definite understanding of the results following an increase or decrease of net resources or liabilities for the period represented in the statement. At this time the teacher may begin such explanation of the sources from which the various amounts appearing in the statement of resources and liabilities would be taken as he may see fit. He can with propriety point out such accounts as would show the various amounts appearing in the statement and make references to such of them as have been included in any of the previous lessons. Again we repeat that it must be remembered that the course of instruction outlined in this text is intended to be suggestive, because it is impossible to outline a course of study that in every detail will meet the exact requirements in the varying conditions of a large number of schools.

LESSON 80

Statements of Resources and Liabilities

The statements in the previous lessons showed an excess of total resources over total liabilities and consequently the difference showed the net resources or net capital of the owner.

In the following problem the difference will show *an excess of liabilities over resources.* As stated in lesson 78, the difference is the *net insolvency* or the amount the owner would be short in paying his debts; in other words, the amount he would have to secure from outside sources in order to pay his debts. Such a difference is technically known as a *deficit.*

When the owner of a business cannot pay his debts he is said to be *insolvent* or *bankrupt.*

In problem 1 it will be shown that a small net capital of the previous year has been absorbed through the losses of the present year, leaving the owner insolvent. The second problem will show how the owner of a business who was insolvent at the close of the previous year has accumulated a small net capital at the close of the present year because of the profits made during the year.

1. Jas. Harris, Milwaukee, Wis., was a dealer in provisions. At the close of the year December 31 his resources and liabilities were found to be as follows:

Cash on hand	$825.50
His inventory of merchandise consisted of:	
50 brls. mess pork @ $12.75	
75 brls. flour @ $7.50	
(Calculate the amount of these two items and enter in the statement)	
His notes receivable amount to	378.60
His accounts receivable amount to	921.12
He owes on notes payable	2,174.27
He owes on accounts payable amounting to	1,483.28

Prepare a statement showing (a) The total resources. (*b*) The total liabilities. (*c*) The present condition of the business, i.e., the amount Mr. Harris is insolvent. (*d*) If his capital at the beginning of the year had been $486.45, what was his total loss for the year. (*e*) If Mr. Harris had decided to close his business, how much would he have had to borrow to pay all of his debts?

2. The following year Mr. Harris continued his provision business. His loss of the previous year was caused by an unexpected drop in the price of various provisions he was buying and selling, so that in order to hold his trade he had to sell considerable of his goods at an actual loss.

At the close of the second year his books showed the following resources and liabilities:

Cash on hand and in bank	$1,322.16
Merchandise per inventory	2,164.38
Accounts receivable on his books amounted to	963.54
Delivery equipment, consisting of an automobile truck	990.00
Notes receivable	100.00

His liabilities consisted of:

He owed on notes payable	1,675.00
He owed on accounts payable	2,814.60

Prepare a statement of his resources and liabilities showing: (a) His total resources. (b) His total liabilities. (c) His net resources or present net capital. (d) What was his total profit for the year? (e) If he drew for his living expenses $1500 during the year besides paying all his other running expenses, what was his net profit for the year?

Purpose and Method: This lesson presents several very interesting propositions which should be carefully studied by the class. Very much simpler oral problems may be suggested by the teacher that will assist in fixing the various facts involved in these statements in the minds of students. Conditions that arise in business where there is considerable fluctuation in the prices of the goods handled, which would cause unexpected losses and sometimes unexpected gains, should be explained. A suggestion of such a condition is cited.

LESSON 81

Distribution of Profits Among Partners

A partnership consists of two or more persons who enter into an agreement between themselves for the purpose of conducting a business. Such a partnership is usually called a *firm* and its members are known as *partners*.

Partnerships are created in almost every line of business, most frequently by merchants and manufacturers and those engaged in commercial and industrial enterprises, and tradesmen such as carpenters, blacksmiths, etc. While there are others, perhaps the most important reason for forming partnerships is to combine the capital and services of two or more persons in a single enterprise, which is often of great advantage and profit.

A partnership may be formed for any purpose that would be lawful for a single person.

All partnerships are formed by agreement between the partners. This agreement is either oral or written. It should always be in writing and most carefully drawn so that the exact agreement of each and all of the partners is plainly and clearly stated.

From a legal standpoint, perhaps the most important point to be remembered is that *each partner is responsible for all the debts of the firm.*

In the following problems some of the purposes for which partnerships are formed are suggested.

1. John Smith and Frank Ward were blacksmiths. They agreed to conduct a general blacksmith business as partners and divide the profits or share the losses equally, after paying the running expenses of the business such as the cost of rent, materials, and the other items that would be necessary in carrying on the business. It was agreed that each partner should take out $20 per week for living expenses.

At the close of the year, December 31, their total resources, which included cash on hand, accounts receivable, shop equipment, materials, and all other property owned by the firm, amounted to $1760. Their total liabilities, consisting of unpaid bills for materials, amounted to $625.50.

Prepare a statement showing the net capital of the firm.

If they had each invested $200 at the beginning of the year in cash for shop equipment, etc., what was their net profit for the year to be divided equally between them? What was each partner's net profit for the year including the sums withdrawn during the year for living expenses?

If each partner had allowed his net profit to remain in the business as an addition to his capital, what would have been the net capital of each partner and the total capital of the firm at the beginning of business January 1?

Suppose Smith and Ward agreed to admit James Woods as an equal one-third partner upon his paying to Smith and Ward, to be divided equally between them, a sum equaling one-third of the net capital of the old firm. What amount would each of the old partners receive?

Purpose and Method: The information contained in this lesson may be greatly amplified by the teacher who is familiar with the formation of partnerships. A simple form of contract complying with the agreement between the partners would be a profitable exercise. A brief explanation of the important law points covering the rights and obligations of partners should be made by the teacher. Similar problems illustrating the simple, every-day contracts that are entered into by those conducting partnerships may be outlined. The teacher has an unlimited field for original instruction and suggestion in this subject, all of which will be of great value to the beginning student of accounts and business affairs.

LESSON 82

Results that Follow Increases and Decreases in Resources and Liabilities

In previous lessons it has been shown that increases in resources and decreases in liabilities, or both, result in an increase in profits. On the other hand, decreases in resources and increases in liabilities, or both, result in an increase in losses. The amount of the profit or the loss for a given period is ascertained as in problem 2 of lesson 79 and in the problems of lesson 80.

In the current operations of business, therefore, it is seen that in like manner:

(*a*) Losses always result in a *decrease* in the *resources* or an *increase* in the *liabilities*.

(*b*) Profits always result in an *increase* in the *resources* or a *decrease* in the *liabilities*.

This means that every current transaction of a business causes some fluctuation up or down in total resources or total liabilities, or both, also in total losses or total profits, or both, and consequently in net resources or net liabilities, and also in net losses or net profits.

Note: The only exeeption to the above statement would be transactions which would in no way change either resources or liabilities and likewise losses or profits. Such transactions would therefore not embrace exchanges of value and seldom occur.

Some Problems Showing Results of Increases and Decreases Above Described

1. If a certain quantity of merchandise cost $750 and was sold for $950, was the difference an increase of resources or of liabilities, of losses or of profits?

2. If seven other like purchases and sales were made, what would be the total amount of the increases or decreases, and what would be increased and decreased?

3 If during the time these purchases and sales were being made, expenses amounting to $450 were incurred, what effect would it have upon the increases and decreases referred to in problems 1 and 2?

4. If two horses were purchased for $250 each and one was sold for $325 and the other for $240, what would be the effect of the transactions upon the resources, liabilities, losses, and profits of the business? If an expense of $25 was incurred in affecting the purchases and sales, what would be the net result of the transactions?

5. If a team of mules with harness, wagon, and other equipment cost $600 and during the month earned $120, with expenses of $50 for a teamster, $40 for feed and stabling, and other expenses for shoeing, repairs, etc., amounting to $8, what effect upon the resources, liabilities, losses, and profits resulted from, (*a*) the purchase of the team, (*b*) the earnings of the team, and (*c*) the expenses of the team, and what would be the net result to the owner?

6. If in the next month the earnings of the team, on account of bad weather, were only $92, as against expenses of $95, how did the net result affect the owner and to what extent?

7. Two men who conducted a contracting business, purchased ten teams at a total cost of $3500, earned a total income for six months of $6000, received in cash, and incurred total expenses of $4000, paid in cash. (*a*) How had the resources of the firm been affected, (*b*) the liabilities, (*c*) the losses, and (*d*) the profits? (*e*) If each partner shared equally in profits or losses, what amount would each partner receive in profits or make up in losses? (*f*) If 10% of the cost value of the teams was taken off for depreciation, what effect would it have (*a*) upon the value of the teams and (*b*) upon the net profit or loss of each partner?

Purpose and Method: This lesson is intended to accentuate the point that in every transaction the net resources, liabilities, profits, or losses are affected either by increasing them or decreasing them, and that the totals of such increases and decreases at the end of a given period determine the extent to which the business has returned a profit or created a loss for the owners.

Are the drill exercises in rapid calculations being continued daily? Is each student's work required to be the best he can produce both as to neatness and accuracy? Only the maintenance of the highest possible standards of quality in the work will bring the satisfactory results that are to be expected from the use of this text.

LESSON 83

Determining the Net Capital of a Proprietor at the Beginning and Close of a Certain Period

1. W. L. Collins determined to open a store January 1 for the sale of dairy products. He had property consisting of refrigerators and other implements and fixtures valued at $1175.75. He had cash amounting to $2000 and notes receivable amounting to $300. There were debts owed to him by old customers amounting to $56.50. All of these he invested as resources in his new business. His only liability was a note for $250 which was not yet due. What was his net capital invested?

2. At the close of the year the value of his refrigerators, implements and fixtures was inventoried at $1376.18. He had other resources as follows: cash $522.16, merchandise per inventory $1985.50, notes receivable $325, and accounts receivable $747.50.

He owed on notes payable $300 and on accounts payable $217.50. What was his net capital at the end of the year?

(*a*) What was the difference between his net capital invested January 1 and his net capital December 31, and what does it show? (*b*) If during the year he had taken out $20 a week for living expenses, what was his total profit for the year? (*c*) If he allowed his net profit for the year, not including the amount withdrawn for living expenses, to remain in the business, what was his net capital at the beginning of the second year, January 1? (*d*) Did his net capital then equal his net resources? (*e*) If his net resources had been further increased, what effect would it have had upon his net profit for the year and his net capital at the end of the year? (*f*) If his net resources had been increased $200, what effect would it have had upon his net profit, his net resources, and his net capital at the end of the year, and what would have been the amount of each? (*g*) If his liabilities had been increased $350, what would have been the effect upon his net profit, his net resources, and his net capital at the end of the year, and what would have been the amount of each? (*h*) If during the year his liabilities had been increased $1500 and his resources decreased $150, what effect would it have had upon his net profit or his net loss for the year and upon his capital invested at the beginning of the year, and what would have been his present net capital? (*i*) Supposing his total resources had been increased $3850 and his total liabilities had been increased $5120, what effect would it have had upon his capital invested January 1.

Purpose and Method: In this lesson the capital invested and the capital at the close of the first year's business are contrasted. Two purposes are accomplished. One is to ascertain the result this will show in profits and in the capital of the owner, and the other is to show such results as would follow under other circumstances.

LESSON 84

Determining the Net Capital of Partners at the Beginning and Close of a Certain Period

Laurens Enos and George C. Diehl enter into business together as partners, each sharing equally in losses and profits, continuing a business formerly conducted by Mr. Enos.

Mr. Enos invests cash $500, merchandise on hand belonging to his former business inventoried at $2600, on which a 10% deduction for old stock is to be made, and notes receivable $850. There is interest accrued on these notes amounting to $37.60. He also invests store room and lot $7000, furniture and fixtures $650, and personal accounts receivable, guaranteed by him to be collectable, $1276. He has no liabilities.

George C. Diehl invests cash $7000 and notes receivable $4000. The accrued interest on these notes is $60. He also invests an automobile truck valued at $1600 on which he owes a note of $320, which the firm agrees to pay when due.

What was the amount of capital invested by each partner and what was the net capital of the firm at the beginning of business January 1.

2. At the close of the year, December 31, the following were the resources and liabilities of the firm as found by the inventory and shown by the books: cash $1756, merchandise $22528.71, notes receivable $350, accounts receivable $2460, store room and lot $7000, furniture and fixtures $1275, and truck $1400.

The firm owes others on account $790. They have no other liabilities and all current expenses as well as salaries of $3000 each have been paid in cash.

(*a*) What are the total resources and liabilities? (*b*) What is the net profit for the year? (*c*) What is the net increase in resources during the year and what does this net increase represent? (*d*) If the net profit should be divided equally between the partners and added to their original investment in the firm, what would be the net capital of each partner? (*e*) How much would each partner have to pay the other to make the capital of each partner equal? (*f*) Who would pay and who would receive the money?

LESSON 85

Proving the Statement of Resources and Liabilities With the Trading and Profit and Loss Statement by a Comparison of the Results Shown

Accountants always prove the correctness of the results shown by the statement of resources and liabilities by comparing them with the results shown by the trading and profit and loss statement. They usually prepare the trading and profit and loss statement first, although either may be given precedence as both are made up from a statement of the various resources, liabilities, expenses and incomes shown by the inventories and the various ledger accounts known as a *trial balance.* It so happens that under modern systems of bookkeeping the total resources plus the total losses equals the total liabilities plus the total gains including the net capital at the beginning of the period as a secondary liability. Just why this is will be explained in later lessons.

Proving the Correctness of Statements by Comparing their Results

1. A statement of Dai Lewis' resources and liabilities, December 31, including cash, merchandise, notes and accounts receivable, and all other property owned and possessed by him showed his total resources to be $96343.60 and his total liabilities to be $7928.80. His trading and profit and loss statement showed an inventory on hand the preceding January 1 of $44560, purchases for the year $78684.50, total sales $104910.30, and an inventory December 31 of $39716.20. His general expenses for the year were $8375, his salary account amounted to $6422, and his total capital at the beginning of the year, January 1, was $81829.80. Prove the correctness of the statement of resources and liabilities by proceeding as follows:

Prepare a trading and profit and loss statement showing (*a*) the gross trading profit, (see illustration 11) (*b*) the net profit, and (*c*) the amount of the present net capital, found by adding the net profit to the investment of January 1 as shown in the following illustration.

Illustration 50

	Net profit for the year		6585
	Proof		
	Capital January 1, 19—	81829 80	
	add Net profit for the year	6585	
	Capital shown by Statement of Resources & Liabilities		88414 80

If this amount equals the difference between the total resources and the total liabilities it proves that the statements agree.

Purpose and Method: The observing teacher has seen that we are gradually bringing together the threads that will finally culminate in a trial balance from which will be prepared the trading and profit and loss statement and the statement of resources and liabilities, the one proving the correctness of the other. While in previous lessons the resources and liabilities items have been named, in this lesson they were omitted for the purpose of emphasizing the items included in the trading and profit and loss statement as a review. In the next lesson it will be seen that the items composing both statements are included.

LESSON 86

Further Examples in Proving the Correctness of Trading and Profit and Loss Statements with Statements of Resources and Liabilities

Freight on Purchases, or "freight in" as it is frequently designated, includes freight, express, drayage, and other similar charges that are paid by the purchaser on goods purchased, *f.o.b. shipping point.* They may be paid by the seller and charged to the purchaser on his bill, which amounts practically to the same thing. Such charges invariably *increase the cost of purchases* and appear as an item in the trading statement.

Freight on Sales, or "freight out," consists of freight, express, drayage, or other similar charges paid by the seller on goods sold *f.o.b. delivery point.* Such items may be charged back to the seller by the purchaser. Unlike freight on purchases, freight on sales is usually considered a *selling expense* and therefore should appear as an item in the profit and loss statement instead of in the trading statement. These two items are included in the preparation of the trading and profit and loss statement required in the following problem.

1. Frank Warner's net capital January 1, 19— was $18560.56 and his inventory of goods unsold on that date was $12452.25. December 31 his purchases for the year were $31227.45 and he paid freight on these purchases amounting to $714.53. His total sales were $46729.37, on which he paid freight f.o.b. delivery point (freight on sales or "freight out") amounting to $1045.18. His inventory at the close of the year was $9347.27.

Mr. Warner's expense account showed the following results: general expenses, including rent, etc., $2400, administrative expenses, including salaries, $3150, and expenses for repairs and renewals of furniture and fixtures $375.

His resources were as follows: cash on hand $500, merchandise inventory at the close of the year $9347.20, accounts receivable $9462.65, notes receivable $7341.42, interest accrued and not collected $613.70, notes payable $3000 and accounts payable $592.25.

Prepare a statement showing the gross trading profit, the net profit, and the present net capital. Also prepare a statement of resources and liabilities, and then prove their correctness by answering the following questions:

(*a*) What is the gross trading profit for the year? (*b*) What is the net profit for the year? (*c*) What is the present net capital as shown by the trading and profit and loss statement? (*d*) What is the net capital as shown by the statement of resources and liabilities and does it agree with the net capital shown by the trading and profit and loss statement?

Purpose and Method: This is bringing the student a step nearer to the final rounding out of the purpose of this text of supplying a preliminary training course in the principles of bookkeeping and accountancy and the arithmetical problems involved therein.

LESSON 87

Distribution of the Resources and Liabilities of a Firm Between the Partners at the Expiration of the Partnership Agreement

The following is an illustration of a not uncommon method of closing the affairs of a firm at the expiration of the contract between the partners. In this instance the business is to be continued by one of the partners.

1. J. A. Amsbaugh and F. H. Darr are equal partners. At the beginning of the year Amsbaugh had a net capital of $6000 and Darr had a net capital of $6700. At the end of the year they concluded by mutual agreement to discontinue as partners, Darr retiring from the firm and the business to be continued by Amsbaugh.

They mutually agreed to divide their resources and liabilities as follows: Cash, which Darr took, $4400, Notes receivable, which he also took, $3700, Merchandise on hand, which Amsbaugh took, $5600. Amsbaugh assumes notes payable of the firm amounting to $2200 and accounts payable amounting to $1100. He took accounts receivable amounting to $6300, on which, however, there is made an allowance to him of 10% for debts that may be uncollectable.

Which partner was indebted to the other and what amount had to be paid from one to the other so that each shared equally in the property of the firm? What was each partner's share of the net resources? No formal statement is required except to list and add the resources received and subtract therefrom the debts assumed by each partner, the sum of the net resources taken over by the partners being equal to the net capital of the firm at the close of the year, which is the net capital at the beginning of the year plus the net profit at the close of the year.

Purpose and Method: This lesson shows the distribution of the property of the firm between the partners. In this instance as Mr. Amsbaugh was to continue the business he took the merchandise and other property that would be necessary to do so. Darr took the cash and other property he could readily turn into money.

LESSON 88

Distribution of Profits Among Partners

In large concerns there are frequently a number of partners with varying interests in the business. The following problems are intended to illustrate the distribution of the net profits of a firm at the end of the year according to the respective interest of each partner in the firm. In this instance the distribution is based upon the proportional amount of the total capital owned by each partner.

1. The net profit after all expenses were deducted was found to be $49473.50. The firm consisted of four partners. A held a two-tenths interest, B a three-tenths interest, C a one-tenth interest and D a four-tenths interest in the capital of the firm. The total capital was $300000. After the net profit for the year had been distributed in proportion to the capital owned by each partner, what was the net capital of each partner December 31?

2. If each of the four partners was to receive a salary of $8000 a year before the division of profits in proportion to the capital owned by each was to be made, what would be the net capital of each partner and the total amount received by each partner from the firm during the year?

Purpose and Method: This lesson is intended to illustrate a common form of settlement between partners in the distribution of their profits for the year.

LESSON 89

Distribution of Profits Among Partners

Brushwood & Company was composed of nine partners with the following investments: E $7000, F $15000, G $5000, H $4000, I $9000, J $10000, K $2000, L $1000 and M $7000, or a total of $60000. At the close of the year, after all expenses had been deducted, there were net profits left amounting to $24580 which were to be divided among the partners in the proportion of each partners net capital to the total capital of the firm. What was each partner's share of the net profits?

2. F had overdrawn his salary $350, H $75, J $1275 and M $66. After deducting these sums from their share of the net profits what was the amount of cash paid each partner in distributing the net profits?

3. In the above problem if instead of each partner withdrawing his share of the profits after the overdrawn salaries had been deducted he had transferred the remainder to his capital account to increase his investment, what would have been the capital of each partner at the beginning of the new year?

Purpose and Method: This lesson shows other phases of partnership settlements and distribution of profits which are very common.

LESSON 90

Preparing Trial Balances

As has been suggested in previous lessons, in modern systems of accounting at the close of the year or other fiscal period *the sum of all the resources and losses equals the sum of all the liabilities and profits plus the net capital at the beginning of the year or other fiscal period.* The reasons for this will be fully apparent when formal sets of books are written up according to any system that conforms to the principles of double entry bookkeeping.

The preparation of a trial balance is very simple. It is made up of the amounts of the balances shown by the various ledger accounts kept. All that is necessary to remember is that all resources and all losses are entered in the lefthand column while all liabilities and all profits are entered in the righthand column. The sum of these columns with the net capital of the concern included as the last item in the righthand column will be found to be equal. If they are not equal it indicates an error or errors, as will be explained at the proper time.

An illustration of the preparation of a trial balance follows. In order to simplify the preparation of a trial balance the resources and losses are named first followed by the liabilities and profits and also the capital at the beginning of the period represented in the capital account in the ledger.

1. At the close of business December 31, Arthur Gardner's books showed the following:

Resources and Losses

Cash on hand	950
Inventory of mdse. on hand (Inventory at the close of the year does not appear in the trial balance taken at that time.)	3,560
Notes receivable	1,275
Accounts receivable	643
Furniture and fixtures	790
Purchases	22,500
General expenses	1,400
Administrative expenses	965
Selling expenses	460
Delivery expenses	180
Freight in	95
Insurance expense	125
Warehouse labor and supplies	600

LIABILITIES

Notes payable	1,780
Accounts payable	2,840
Sales account	25,400
Net capital at beginning of business January 1	3,523

Prepare a trial balance in the form shown in the illustration in Lesson 91, omitting the letters shown on the left margin.

Purpose and Method: It should be remembered that the inventory taken at the end of the year, December 31, is not included in the trial balance. It is included, however, in the trading statement as well as the statement of resources and liabilities as will be fully explained in the following ten lessons. This entire course of lessons is suggestive in character as it is intended to be quite flexible so as to meet the many different grades of ability and application that will be found in the various schools for which this book is intended.

LESSON 91

PREPARING STATEMENTS FROM TRIAL BALANCES

In this and the following lessons trial balances prepared as explained in lesson 90 are presented from which the student is expected to prepare trading and profit and loss statements and statements of resources and liabilities.

The following trial balance dated Dec. 31, 19— was taken from the books of N. C. Butler who opened a small grocery store January 1, 19— which he has been conducting during the year. It will be seen that his original investment was $500. His inventory at the close of the year, December 31, was $984.40. He had no inventory at the beginning of the year.

In this and some of the succeeding trial balances, items belonging to the trading statement are indicated by the letter "T" to the left, those belonging to the profit and loss statement are indicated by the letters "P & L", and those belonging to the statement of resources and liabilities are indicated by the letters "R & L." It will be noticed that the inventory at the close of the year appears not only in the trading statement but also in the statement of resources and liabilities.

Trial Balance, Dec. 31, 19—. M. C. Butler

R & L	M. C. Butler, Capital a/c	402.98	500
R & L	Cash		
R & L	B. J. Clark		115.42
R & L	A. C. Beacom	196.27	196.90
R & L	B. M. Harris & Sons	139.22	
R & L	J. R. Warner	3,451.56	
T	Purchases		
T	Sales	375.78	3,753.49
P & L	Expense	4,565.81	4,565.81
T and R & L	Inventory Dec. 31, $984.40		

Purpose and Method: In this and the following lessons the purpose is to have the student acquire the ability to prepare trading, profit and loss and resource and liability statements under various conditions, both for single proprietor and partnership concerns.

LESSON 92

Preparing Statements from Trial Balances

This trial balance is similar to the one in the preceding lesson except that the inventory of the previous year carried over under date of January 1 is included. It will be recalled that both the inventory at the beginning of the year and the inventory at the end of the year will be included in the trading statement, but only the inventory at the end of the year will be included in the statement of resources and liabilities. Proceed to prepare the trading and profit and loss statement and also the statement of resources and liabilities from this trial balance.

Trial Balance, Dec. 31, 19—. H. C. Blake

R & L	H. C. Blake, Capital a/c		1,600
R & L	B. F. Woodward & Son	527.40	
R & L	John H. Walsh		211.17
R & L	C. H. Wilson & Bro	195.16	
R & L	Carter Grocery Co	216.70	
R & L	White & Carr Co		388.72
T	Inventory Jan. 1, 19—	1,673.28	
T	Purchases	5,275.89	
T	Sales		7,428.19
P & L	Expense	1,575.21	
R & L	Cash	164.44	
		9,628.08	9,628.08
T and R & L	Inventory Dec. 31, $721.19		

Answer the following questions: (*a*) How much has the owner's investment been increased or diminished? (*b*) If because of a fire or for some other reason he had no inventory at the close of the year, December 31, how would it have affected his interest in the business? In preparing the above statements do so with the utmost care and neatness.

LESSON 93

Preparing Statements from Trial Balances

In this trial balance items for furniture and fixtures and sales returned are included, which have not appeared in previous trial balances. It will also be seen as the preparation of the statements proceed that the business has not been a profitable one. It will be observed that while the trading statement will show that the goods were sold at a profit it was not sufficient to meet the expenses and consequently the proprietor has lost part of his capital invested. No special instructions are necessary because the student has had everything that is involved in this statement.

Trial Balance, Dec. 31, 19—. M. J. Williams

R & L	Cash	98.20	
R & L	Store Furniture & Fixtures	95.20	
R & L	M. J. Williams, Capital a/c		1,000
R & L	Accounts Receivable	954.25	
T	Inventory Jan. 1	875.45	
T	Sales		8,973.17
P & L	General Expense (includes prop's salary)	1,621.43	
R & L	Accounts Payable		510.99
T	Sales Returned	71.45	
T	Purchases	6,306.98	
P & L	Selling Expense	461.20	
		10,484.16	10,484.16
T and P & L	Inventory Dec. 31, $253.82		

(*a*) How much was the proprietor's net loss? (*b*) If the inventory December 31 had been $2253.82 instead of what it was, how would it have affected the owner's interests?

LESSON 94

Preparing Statements from Trial Balances

F. A. Sharrer & Son's trial balance December 31 was as follows. The father and son are partners. The store and lot item is new. There are also items for warehouse labor and sales rebates and allowances, which have not appeared before. It is understood that the net profit is to be divided in proportion to the ownership interest of each partner. Prepare the statement as heretofore instructed.

Trial Balance, Dec. 31, 19—. F. A. Sharrer & Son

T	Inventory Jan. 1, 19—	1,071.45	
R & L	Notes Payable (owed on store bld.)		500.00
R & L	Store & Lot Investment	4,000.00	
R & L	Furniture & Fixtures	215.00	
R & L	F. A. Sharrer, Capital a/c		3,000.00
R & L	D. R. Sharrer, Capital a/c		1,000.00
T	Purchases	9,527.83	
T	Warehouse Labor	722.40	
R & L	Cash	843.41	
T	Sales		13,471.52
T	Sales Returned	55.27	
T	Sales Rebates & Allowances	21.70	
R & L	Accounts Receivable	1,227.52	
P & L	General Expense (includes salaries)	2,848.04	
R & L	Accounts Payable		1,561.10
		19,532.62	19,532.62
T and R & L	Inventory Dec. 31, $1293.15		

If the inventory December 31 had been $1000 less how would it have affected the interests of the partners?

LESSON 95

Preparing Statements from Trial Balances

J. C. Brooks and Co. is the name of the firm whose trial balance of December 31 appears below. While their capital interest is different they are to share equally in gains and losses because of Mr. Cross' larger experience in the business they are engaged in. The only new items appearing in this trial balance are those for freight on purchases, which is explained in lesson 86, and sales discounts, which is disposed of as shown in illustration 13, page 23.

Trial Balance, Dec. 31, 19—. J. C. Brooks & Co.

J. C. Brooks, Capital a/c		2,461.25
I. J. Cross, Capital a/c		4,922.50
Accounts Receivable	4,117.28	
Accounts Payable		1,392.45
Notes Receivable	1,652.60	
Notes Payable		1,595.20
Furniture & Fixtures	375.90	
Purchases	16,364.71	
Freight on Purchases	473.41	
Warehouse Labor	842.	
Inventory Jan. 1	2,176.48	
Sales Jan 1		20,378.45
Sales Rebates & Allowances	12.43	
Sales Discounts	279.16	
Sales Returned	125.78	
General Expense	2,472.55	
Selling Expense	427.80	
Cash	1,429.75	
	30,749.85	30,749.85

Inventory Dec. 31, $2976.40

Note: The statements on which these items should appear are not indicated in this lesson because the student should have no difficulty in determining the proper statements on which the various items should appear.

After the statements have been prepared and proven to be correct, answer the following questions (*a*) What would be each partner's net capital if the net profit had been divided equally? (*b*) What would be each partner's net capital if Brooks had received one-third and Cross two-thirds of the net profit?

How would it have affected the net profits of each partner if the inventory December 31 had been $2000 less or $5000 more?

LESSON 96

Preparing Statements from Trial Balances

Horses and wagons, purchases returned, rent, taxes and insurance, interest cost, and interest income are additional items in the trial balance of Walter M. Lawton, who is conducting a grocery business. The investment in horses and wagons is a resource. The student is already familiar with the method of disposing of purchases returned. Rent, taxes and insurance are usually included in the items for general expense. In this instance doubtless Mr. Lawton wanted to know their cost apart from his other like expenses, and for this reason kept a separate account for them.

Interest cost should appear in the profit and loss statement as a loss, while the interest income should appear in the same statement as a profit. Since this item *is not an income resulting from the trading in merchandise*, after the gross trading profit has been determined, it should be shown as a separate item under the heading "Income." It should appear as the first item in the profit and loss section of the complete statement. The word "Income" is written in the same relative position occupied on the statement by the words, "Returns," "Cost," "Expenses," etc. Additional income items would be entered under the common heading with the amounts entered in the righthand column. It is from the sum of such items and the gross trading profit that the expenses are deducted to find the net profit.

Prepare the trading and profit and loss statement and also the statement of resources and liabilities.

Trial Balance Dec. 31, 19—. Walter M. Lawton

Cash	1,758.92	
Inventory Jan. 1, 19—	1,425.78	
Notes Payable		1,173.60
Accounts Receivable	3,116.47	
Accounts Payable		1,977.66
Notes Receivable	2,272.89	
Horses & Wagons	676.90	
Purchases	23,990.79	
Warehouse Labor & Supplies	1,629.14	
Purchases Returned		102.04
Sales		28,288.77
Sales Discounts	327.48	
Rent, Taxes & Insurance	1,728.43	
Interest Cost	25.47	
Interest Income		13.96
General Expense	2,389.76	
Walter M. Lawton, Capital a/c		7,786.00
	39,342.03	39,342.03

Inventory Dec. 31, $3024.74

It would doubtless be interesting to Mr. Lawton to know what was the percentage of his gross trading profit based upon the cost of the goods sold. This can be ascertained by dividing the profit by the cost. He might also be interested in knowing what percentage on his capital stock his net profits for the year represented. Suggestion: Finding the percentage of the cost of purchases represented in warehouse labor and supplies, the percentage of purchases returned, the percentage of sales discounts based on total sales, and the percentage of rent, taxes and insurance and other general expenses based upon the gross trading profit may also be used as excellent material for drills. It should be observed that the last ten lessons in this book present work that is done by the accountant rather than the bookkeeper.

LESSON 97

Preparing Statements from Trial Balances

Office salaries are usually included in administration expense and should be disposed of in the same way. In this trial balance there are several such divisions of accounts with which the student is already familiar. Prepare the statements as previously instructed.

Trial Balance Dec. 31, 19—. John S. Bridges

Cash	1,314.84	
Notes Payable		2,259.63
John S. Bridges, Capital a/c		12,246.40
Accounts Receivable	3,421.27	
Furniture & Fixtures	452.70	
Accounts Payable		2,176.85
Building & Lot Investment	12,500.00	
Notes Receivable	1,729.87	
Inventory Jan. 1	3,276.48	
Freight on Purchases	575.38	
Warehouse Labor	962.80	
Purchases	20,147.24	
Warehouse Supplies	310.16	
Purchases Returned		181.90
Sales		32,804.90
Sales Returned	211.12	
Sales Rebates & Allowances	76.42	
Sales Discounts	429.75	
General Expense	728.46	
Selling Expense	973.19	
Office Salaries	2,560.	
	49,669.68	49,669.68
Inventory Dec. 31, $3092.46		

Supposing a fire had burned the stock of goods on hand December 31, how would it have affected the owner's account? Supposing the maker of a note for $1000 included in the item of notes receivable had failed and his note was uncollectable, what effect would it have had upon the owner's interest in the business?

LESSON 98

Preparing Statements from Trial Balances

Roche & Grant is the firm name of the concern whose trial balance appears below. The student at this point should have no difficulty whatever in determining whether any item shown in the lefthand column is a resource or a loss, or in determining whether any item shown in the righthand column is a liability or a profit. It should be remembered that the owners' interest shown in the righthand column is the capital invested at the beginning of the fiscal period represented in the trial balance. Every transaction since has affected this capital investment one way or the other through the increases and decreases of his resources and liabilities which result from the loss or profit in each transaction, as explained in lessons 78 and 82. In the preparation of the statements for this trial balance the partners are to share equally in the losses or profits.

Notice that in this trial balance there are no inventories, which means that there were no goods on hand at the beginning of the year and those purchased during the year were entirely disposed of before the end of the year when the trial balance was taken.

Trial Balance Dec. 31, 19—. Roche & Grant

F. M. Roche, Capital a/c		2,000.00
R. H. Grant, Capital a/c		2,000.00
Notes Receivable	1,878.34	
Accounts Receivable	2,922.78	
Notes Payable		3,278.46
Accounts Payable		4,792.35
Store Fixtures & Equipment	728.50	
Cash	542.18	
Purchases	22,716.93	
Freight on Purchases	613.92	
Warehouse Labor & Supplies	1,386.92	
Purchase Rebates & Allowances		112.40
Purchase Discounts		12.17
Sales Returned	596.72	
Sales		23,796.15
Sales Rebates & Allowances	79.28	
General Expense	3,127.48	
Selling Expense	1,141.52	
Interest Cost	256.96	
	35,991.53	35,991.53

If it were later found that $922.78 of the amount represented in the item of accounts receivable could not be collected owing to the failure of the party who owed Roche & Grant, what effect would this loss have upon their interest in the business? If a saving of 4% of the total expenses could be made, what would have been the net profit to be divided between the partners? If by using cartons instead of more expensive boxes in the shipping department the item for warehouse labor and supplies could have been reduced one-fourth, what effect would the result have had upon the net profit of the firm and upon each partner's net capital?

LESSON 99

Preparing Statements from Trial Balances

Delivery equipment in this trial balance is similar to the item for horses and wagons in previous lessons and is disposed of in the same way.

Trial Balance, Dec. 31, 19—. Morton & Cramer

J. K. Morton, Capital a/c		5,276.12
B. B. Cramer, Capital a/c		5,276.12
Sales		40,127.48
Freight on Purchases	792.71	
General Expense	2,977.46	
Warehouse Supplies	422.70	
Rent, Taxes & Insurance	1,573.82	
Accounts Payable		3,175.47
Furniture & Fixtures	550.60	
Delivery Equipment	1,250.00	
Purchases	32,935.77	
Warehouse Labor	1,127.85	
Sales Rebates & Allowances	125.60	
Purchase Discounts		409.06
Selling Expense	1,219.16	
Notes Payable		2,975.40
Purchases Returned		66.72
Notes Receivable	2,117.18	
Cash	2,859.71	
Purchase Rebates & Allowances		29.17
Inventory Jan. 1, 19—	587.20	
Sales Discounts	4,579.63	
Accounts Receivable	4,216.15	
	57,335.54	57,335.54

Inventory Dec. 31, $5142.70

Was Morton & Crane's business profitable? What percentage of his capital was each partner's net gain? What was the percentage of gross trading profit on the cost of the merchandise sold? What percentage of the gross trading profit was required to meet expenses? Was this percentage greater or less than in the case of Roche & Grant in the preceding lesson?

LESSON 100

Preparing Statements from Trial Balances

In the trial balance of Carpenter & Company, shown below, interest payable accrued is a liability, Interest income is a profit. It should be disposed of as explained in lesson 96. Many business men consider purchase discounts as an item that should appear under the heading of "Incomes" in the profit and loss statement rather than as a deduction from the cost of purchases in the trading statement. They reason that they are able to secure discounts on purchases because they have the capital and that any saving in the cost of purchases should therefore appear as a separate income rather than as a reduction of the cost of purchases. For this reason, in this lesson prepare two trading and profit and loss statements, one showing the item of purchase discounts as a deduction from the cost of purchases in the trading statement, and the other showing it as an income item in the profit and loss statement. The final results to the firm will be the same. Divide the net profit or the net loss in proportion to the investments of the partners.

Trial Balance, December 31, 19—. Carpenter & Company

Allan Carpenter, Capital a/c		3,867.25
John R. Bronson, Capital a/c		11,601.75
E. F. McGraw, Capital a/c		7,734.50
Building & Lot Investment	11,276.90	
Delivery Equipment	1,570.00	
Furniture & Fixtures	789.45	
Inventory Jan. 1	9,765.78	
Purchases	61,894.35	
Accounts Receivable	6,944.58	
Accounts Payable		5,578.14
Notes Receivable	3,720.40	
Notes Payable		6,000.00
Interest Payable Accrued		30.00
Warehouse Labor and Supplies	2,373.67	
Freight on Purchases	872.14	
Purchases Returned		242.00
Purchases Rebates & Allowances		95.42
Purchase Discounts		725.85
Sales		76,291.98
Sales Discounts	921.71	
Sales Rebates & Allowances	311.26	
Sales Returned	502.14	
General Expense	4,385.19	
Interest Cost	125.13	
Selling Expense	2,175.80	
Delivery Expense	561.20	
Building Repairs & Renewals	109.16	
Interest Income		37.42
Cash	3,905.45	
	112,204.31	112,204.31

Inventory Dec. 31, $11,216.43